

GEORGE WRAGGE

WARDRY: METAL WORKS
SALFORD
MANCHESTER:
22 SURREY STREET: STRAND
LONDON: W.C.



METAL: CASEMENTS
AND FRAMES WROUGHT: IRON

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R. 6 x 112

Printed by
Chorlton & Knowles, Mayfield Press,
Manchester.



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All previous Lists are hereby cancelled.

Wardry Metal Works, Salford,
Manchester, May, 1898.



EAR SIR,

In presenting this Catalogue to the Architectural Profession I have endeavoured, with Mr. Edgar Wood's assistance (which I gratefully acknowledge) to provide for the increasing enquiries for ARTISTIC and INTERESTING Metal Work in all its varieties, and I hope by the way in which this has been done that this Catalogue may have a value beyond that of the ordinary commercial type.

In addition, I have tried to make the work as comprehensive and as easy of reference as possible; a complete index will be found on page 6, while the title page preceding each Department gives some details of its particular section.

That portion of the Catalogue relating to metal casements is carefully priced and detailed; it was, however, thought undesirable to price the metal work portion of the book, but in this case merely to illustrate suggestions and give an idea of the feeling I am anxious to introduce into this most interesting Department.

It will be noticed that in the casement section, and indeed throughout the book, the drawings shew the "application" of the various articles; this, in addition to lending interest to the various pages, will doubtless be helpful to the architect and client in making their selection.

I take this opportunity of inviting you to visit my workshops to see the work in progress, and to form your own judgment as to the capabilities of my establishment.

Yours faithfully,

A handwritten signature in cursive script, reading 'George Wardry'.

Registered No. 503

To M^r Wrd & Grd Wardry
Birmingham

With Compliments.

INDEX.

Attention is drawn to the Index (page 6), where easy reference can be made to the various articles illustrated.

TERMS.

All goods to be packed and delivered free on rails Manchester. Payments to be made at the rate of 80 per cent. of the total value on delivery, and the balance in one month, or subject to special arrangement. All cases to be returned in good condition, carriage paid, within 14 days from receipt of goods.

ORDERING.

When ordering Metal Casements, the section should be stated, and the Nos. of the designs of the fittings (see pages 37 to 47), if differing from those specified. The sizes should be given nett "daylight," and full size details of the jambs, head and sill sent, shewing which is outside. The "hands" also should be given if Side Hung Casements, and notification should be made as to whether clear glass or leaded glazing is to be used. An order sheet, shewing example, will be posted on application. Measurements will be taken by a member of our staff free of charge where the order is of sufficient magnitude to cover his expenses.

GENERAL REMARKS.

Each section of Casement is drawn full size, as well as the details of the rebates which are recommended. The Casements can be fitted to grooved or other details. Those sections having GROOVED outer frames are specially designed to overcome difficulties in this respect. A description is given on each page of illustrations.

Casements for highest class work are illustrated on pages 9 to 19, and those of simpler form on pages 21 to 31.

A comparative price list is given on pages 32 and 33.

Each form of Casement is illustrated on page 49.

Each section is rolled in BRONZE, and special estimates will be given on receipt of specification and quantities.

All fittings are interchangeable, and are made on the premises.

The fixing of Casements requires careful attention; a separate staff is retained for this purpose, and clients will be well advised to ask for an estimate for this portion of the work.

The GLAZING, too, is important. Glaziers' putty should on no account be used, but an oil mastic cement (separate list for mastic cement will be posted).

An estimate will be given for the glazing in clear glass or leaded work.

SASHES, see pages 51, 52, 53, 54, and 55.

The matter on pages 4 and 5 speaks for itself.

GEARING is specially dealt with on page 50.

METAL WORK. This is a big department. Particular attention is drawn to the illustrations (see pages 57 and onwards).

LEADED LIGHTS, see page 93. A separate Catalogue will be posted free on application.

The following is an abbreviated LIST OF BUILDINGS where our Casements & Sashes have recently been or are now being supplied.

CASEMENTS & FRAMES.

NEW TECHNICAL SCHOOLS, MANCHESTER.
(Some hundreds of our best sections.)
ROYAL ASYLUM, CHEADLE.
CHRISTIE LIBRARY, OWENS COLLEGE.
GOVERNMENT BUILDINGS, DUBLIN.
ROYAL INFIRMARY, BRISTOL.
ROSS HOSPITAL, HEREFORDSHIRE.
NEW MEDICAL SCHOOL, MIDDLESEX HOSPITAL.
BROOK HOSPITAL, LONDON.
SOUTH WESTERN do.
SOUTH EASTERN do.
(Several thousand Casements in all of our No. 12 section, page 9.)
EAST LANCASHIRE INFIRMARY, BLACKBURN.
THE NEW TRAMWAY OFFICES, DUBLIN.
COTTAGE HOMES, STYAL.
NEW GRAND ARCADES, LEEDS.
NEW SANATORIUM, ASTLEY, LANCASHIRE.
MONASTERY, ERDINGTON, BIRMINGHAM.
NATIONAL PROVINCIAL BANK, LEEDS.

PARR'S BANK—BRANCHES, viz.—
ST. MARTIN'S LANE; HIGHGATE; EARL'S COURT ROAD.
HOTEL METROPOLÉ, BLACKPOOL.
SCHOOLS AT WEST TWERTON, NELSON,
BLACKPOOL, BATH, &c., &c., and at
NUMEROUS CHURCHES.
RESIDENCE AT LOCUST AVENUE, PHILA-DELPHIA.
(Upwards of 230 of our No. 20 section BRONZE Casements, page 11, are now being supplied to this mansion.)
BLACKHEATH PARK, LONDON.
SIR ARTHUR SASSOON'S HOUSE, PARK LANE.
HARPENDEN, SURREY; CHURCH STRETTON;
LINGFIELD, SURREY; ACOMB HALL, YORK.
CLAVERTON HALL, BATH.
BRIDGEWATER HOUSE, LONDON.
WARDLEY HALL, WORSLEY.
JOHNBY HALL, CUMBERLAND.
FARMINGWOODS HALL, NORTHAMPTON.
AND AT EASTBOURNE, ISLE OF WIGHT,
EDINBURGH, YORK, &c.
OFFICES OF THE LINOTYPE WORKS.
(A large number of our No. 20 section BRONZE Casements, page 11, have been fixed at these Offices.)

STEEL SASHES.

MESSRS. VERNON'S FLOUR MILLS,
BIRKENHEAD.
(Over 20,000 superficial ft. of our 2in. engd. bar, No. 10,
page 53, and 250 casements have been supplied to
these buildings.)
THE GENERAL ELECTRIC CO.'S WORKS,
MANCHESTER.
(Over 10,000ft. 2in. sections, and 200 casements.)
MESSRS. WORRALL'S DYE WORKS.
(Over 10,000ft. 2in. section, and 300 casements.)
MESSRS. MAGEE, MARSHALL & CO'S BREWERIES AND BONDED STORES,
BOLTON.
(Over 10,000ft. 1½in. section No. 16, page 53.)
NEW TELEGRAPH FACTORY, BOVAY PLACE,
LONDON, FOR H.M. OFFICE OF WORKS.

POST OFFICE, CARDIFF, FOR H.M. OFFICE
OF WORKS.
POST OFFICE, WEST HARTLEPOOL, do.
INK WORKS, HORNSEY.
WHITE WEBB'S PUMPING STATION,
ENFIELD (NEW RIVER CO.)
NEW WAREHOUSE, MANCHESTER, FOR
MESSRS. JOHNSON, CLAPHAM & MORRIS.
SCHOOLS, APPLETON, BOLTON, STOCKTON,
ABERDEEN, &c., &c.
NEW RIVER CO.'S. ENGINE HOUSE,
CLERKENWELL.
MESSRS. FRY'S NEW FACTORY,
LONDON, E.C.
MESSRS. GOODALLS & SONS' FACTORY,
LONDON, N.W.; AND MANY OTHERS.

METAL WORK.

NATIONAL PROVINCIAL BANK, LEEDS.
(In Aluminium throughout.)
MERCANTILE BANK OF LANCASHIRE
(HEAD OFFICES).
BANK OF LIVERPOOL (HEAD OFFICES).
MANCHESTER & COUNTY BANK, SOUTH-
PORT. (Also the Casements.)
CAPITAL & COUNTIES BANK, BATH.
MANSION, ST. HELENS, DUBLIN.

BATH CORPORATION.
(Over 50 Bronze Tablets to designs by their architects,
Messrs. Silcock & Rose.)
HOTEL METROPOLÉ, BLACKPOOL.
THE TOWER, NEW BRIGHTON.
SCHOOL BOARD OFFICES (HEADQUARTERS),
LIVERPOOL.
COBORN GIRLS' SCHOOL, BOW ROAD,
LONDON.
VARIOUS CHURCHES, &c., &c.

COPIES OF TESTIMONIALS.

1, VICTORIA STREET, WESTMINSTER, S.W.
January 22nd, 1897.

Dear Sir,—The wrought iron casements which you have supplied to the Brook Fever Hospital, Shooters Hill, and several other large public buildings of which I am the architect, are excellent in quality and very reasonable in price. They have given me great satisfaction.

Yours truly (signed), THOS. W. ALDWINCKLE.

6, ABBEY SQUARE, CHESTER, March 26th, 1898.
Dear Sir,—It is a matter of regret to me that I have not used your casements in a recent work, especially as those you supplied to Wardley Hall, Worsley, for the Bridgewater Trustees, were so satisfactory, not only in appearance but for being weather-tight. I hope in the course of the summer to give you an order.

I remain, yours faithfully,

(Signed), JOHN DOUGLAS (of DOUGLAS & MUNSHILL.)

95, CANNON STREET, LONDON, E.C., April 2nd, 1898.
Mr. George Wragge has recently carried out some wrought iron railings and gates for me in a satisfactory manner. I am placing more work in his hands.

(Signed), GEORGE ERLINGTON.

32, KING ST. WEST, MANCHESTER, March 29th, 1898.
Dear Sir,—I have much pleasure in informing you that the metal casements which you have supplied for several years for various buildings carried out under my superintendence have been perfectly satisfactory to me, and have met with the entire approval of my clients. I may add that some of these have been fixed with every success in very exposed and trying positions. Yours truly (signed), JOHN ELY.

6, MILLSTONE LANE, LEICESTER, March 26th, 1898.
Dear Sir,—The wrought-iron casements you fixed at the Technical and Art Schools here are satisfactory to us.

Yours faithfully (signed), EVERARD & PICK.

16, HIGH STREET, CARDIFF, May 9th, 1897.
Dear Sir,—I am pleased to say that the whole of your work at the Bute Offices has been carried out and finished completely to my entire satisfaction.

Yours faithfully (signed), WILLIAM FRAME.

31, JAMES STREET, LIVERPOOL, March 28th, 1898.
We have pleasure in stating that Mr. George Wragge has supplied the metal casements for several houses for us, and that they have been most satisfactory.

(Signed), GRAYSON & OULD.

26, CASTLE STREET, SHREWSBURY, March 7th, 1898.
Dear Sir,—In answer to yours of the 22d Feb., re casements, church restoration, your casements are a perfect success and give every satisfaction, and shall certainly order from you when I have any more work requiring iron casements.

Yours faithfully (signed), S. GINGELL JONES.

7, DOUGHTY ST., MECLENBURG SQ., W.C.,
March 28th, 1898.
Dear Sir,—I have great pleasure in saying that the ornamental wrought iron gateway and the wrought steel sashes which you have at various times executed for works under my superintendence, have always given me great satisfaction. The gateway at St. Peter's Church has been greatly admired.

Yours faithfully, (signed), JOHN LADDS.

SUN BUILDINGS, GLASGOW, May 28th, 1896.
The fittings are first-rate, and I am well pleased with them.

(Signed), WM. LEIPER.

EXCHANGE BUILDINGS, BRADFORD, Dec. 17th, 1895.
The casements are very satisfactory.

(Signed), MAWSON & HUDSON.

THE COURTS, CARLISLE, April 9th, 1898.
Dear Sir,—I have used your casements now for several years and I am glad to say that I have never yet had any cause for complaint. I have found them of good workmanship and appearance, and perfectly efficacious in resisting the weather, in which respect they have been well tried in this district. I have specified them again recently in some restorations of old work.

Yours faithfully,

(Signed), GEO. DALE OLIVER.

10, GEORGE STREET, EDINBURGH, April 23rd, 1896.
Dear Sir,—Allow me at the same time to express my entire satisfaction with the sashes. They are a very satisfactory job in wrought iron work.

(Signed), R. HAMILTON PATERSON.

CENTRAL BANK CHAMBERS, TORCHER ST., LEEDS.

January 22nd, 1897.

We have pleasure in stating that we consider the metal casements and wrought metal work executed by Mr. George Wragge to be of most excellent quality and workmanship.

(Signed), PERKIN & BULMER.

61, ROYAL AVENUE, BELFAST, February 1st, 1898.
We have found your second quality casements to be most satisfactory in several works we used them in lately.

(Signed), JAS. S. & J. PHILLIPS.

1, ST. MARY'S PLACE, KILMARNOCK, Feb. 16th, 1897.
KILMARNOCK INFIRMARY.

Dear Sir,—I duly received yours of the 3rd December last, and an answer would have been sent sooner, but that it was thought best to see how the winter weather might affect the windows. I am glad to say that in all weathers the windows have given great satisfaction. (Signed), WM. RAILTON.

WESTMINSTER, S.W., March 31st, 1898.
The iron casements and other wrought iron work you have supplied, give me great satisfaction.

(Signed), ROLFE & MATTHEWS.

9, ADAM STREET, ADLPHL, LONDON, W.C.,
March 1st, 1895.

Dear Sir,—I have pleasure in saying that the work you have executed from my designs has been quite satisfactory. The porch at Notting Hill and the gates at Kensford are all that can be desired in wrought ironwork, the spirit of the style is well preserved in the scrolls and leaves, and the workmanship is very good indeed.

Yours faithfully (signed), F. W. ROPER.

OCTAGON CHAMBERS, MILNOR STREET, BATH.
We have used Mr. George Wragge's casements for some years and have always found them to be extremely effective in weather-proof qualities and of excellent workmanship throughout. The fittings of these casements, made in a number of pleasing designs, leave little to be desired in the way of finish and effectiveness. We are glad to recognize in all Mr. Wragge's decorative metal work, a high standard of quality and artistic craftsmanship; and designers may always rely upon him to faithfully maintain the distinctive character of their work.

(Signed), SILCOCK & REAY.

12, ALCEON STREET, LEEPS, March 26th, 1898.
Dear Sir,—It gives me pleasure to state that you have provided me with ornamental metal work for buildings of which I have been the architect, and that the work has in all cases been executed to my satisfaction. At the Leeds School of Medicine you supplied the entrance gates and staircase and gallery balustrades, and more recently you have provided an ornamental iron balaustade for the warehouse of Messrs. Hotham & Whiting, Wellington Street, Leeds. The interior casement windows of the Operating Department of the Bristol Royal Infirmary which is being remodelled from my designs are being supplied by your firm. In all orders entrusted to your charge, I have found the work artistic in spirit and excellent in execution.

I am, yours faithfully,

(Signed), WILLIAM H. THORP, F.R.I.B.A.

19, QUEEN ANNE'S GATE, LONDON, S.W.,

January 19th, 1897.

Dear Sir,—I have on several occasions used your casements, and have found them very satisfactory.

(Signed), ASTON WEBB.

STAFFORD, December 2nd, 1897.
I hope this is not the last transaction we may have together. I am thoroughly satisfied with your casements.

Yours truly (signed), GEORGE WORMAL.

INDEX.

A	PAGE.	K	PAGE.
ART METAL WORK	Item 37	KERBS	67
ALTAR RAILS	79	KNOCKERS (DOOR)	69
B			
BALUSTRADES AND BALUSTERS	63	LAMPS (OIL)	87
BRASSES (MEMORIAL &c.)	89	LECTERNS	79
C			
CASEMENTS, Side Hung, to open out	9, 11, 19	LEADED LIGHTS	97
Do. do. to open in	21, 23, 31	LETTER PLATES	69
Do. do. in pairs	19	LOCK PLATES	69, 71
Do., Centre Hung, opening in and out	49	LIST OF CONTRACTS	8
Do. do. ordinary type	1	M	
Do., Top Hung, to push out	9, 11, 21, 23, 31	MEMORIAL TABLETS	89
Do., Bottom Hung, to fall back	27	METAL WORK	Item 37
Do. HOPPER	49	N	
Do. SLIDING	49	NAME PLATES	89
Do. POLICE CELL	49	NEWELS	63
Do. STABLE	49	O	
Do. LOUVRE	49	OLD HANDLES AND PLATES	41
Do. FITTINGS	35	OIL FITTINGS	87
(Handles, Stays, Plates, &c.)		ORDERING (INSTRUCTIONS FOR)	3
CABINET FITTINGS	71, 75	P	
CHANCEL SCREENS	79	PLAQUES	81
COMMUNION RAILS	79	PLATES (REPOUSSE)	81
Do. PLATE	61	PLATES (CASEMENT)	39, 41, 43, 45
CANDLESTICKS	81	PANELLING	63
CONTRACTS (LIST OF)	4	PEWTER WARE	81
D			
DOOR FURNITURE	69, 71, 73, 75	PARK GATES	59, 61
DOG GRATES	67	PILLAR SIGNS	77
DISHES (REPOUSSE)	81	Q	
DESKS (READING)	79	REPOUSSE WORK	81
DOOR KNOCKERS	69	READING DESKS	79
DOOR HANDLES	69, 71, 75	RAILINGS	63
E			
ENGRAVED PLATES AND BRASSES	89	R	
ELECTRIC LIGHT FITTINGS	83	REPOUSSE WORK	81
ENTRANCE GATES	59, 61	READING DESKS	79
F			
FENDERS, KERBS & FIRE IRONS	67	RAILINGS	63
FURNITURE (DOOR)	69, 71, 73, 75	S	
FINGERPLATES	69, 71, 73, 75	SIGNS (HANGING AND OTHERS)	77
FINAL	63	SHAM BANDS	69, 71, 73, 75
FONT COVERS	79	SASHES (WINDOW)	55
G			
GATES	59, 61	Do. (SECTIONS)	53
GAS FITTINGS	83	STABLE WINDOWS	49
GRYLLES	61	SCREENS (CHANCEL)	79
GRATES	67	STAIR RAILINGS	51
GENERAL REMARKS	3	STAINED GLASS	93
H			
HANGING SIGNS	77	T	
HANDLES (DOOR)	69, 71, 73, 75	TERMINALS	65
Do. (CASEMENTS)	37, 39, 41	TERMS OF PURCHASE	3
HINGES	69, 71, 73, 75	TESTIMONIALS	5
HOSPITAL WINDOWS	49	U	
HOODS (FOR GRATES)	67	VANES	65
HANDRAILS	65	V	
I			
INDEX	6	VANES	65
INTRODUCTORY REMARKS	2	W	
IRONS (FIRE)	67	WINDOWS (SEE CASEMENTS)	
J			
JUGS	81	X	
Y			
Z			

CASEMENTS & FRAMES.

PAGES.

Side Hung Casements, opening outwards	8, 10, 20, 22, 30.	
Do. do. do. inwards	-	12, 24.
Do. do. do. in pairs	-	- 18.
Centre Hung do. do. in and out	-	- 48.
Do. do. do. ordinary type	-	14, 28.
Top Hung do. do. outwards	8, 10, 20, 22, 30.	
Bottom Hung do. do. inwards	-	16, 26.
Hopper Casements (for Churches, Schools &c.)	-	48.
Sliding Sashes, Police Cell Windows & Stable	do.	48.

Casements for high class work, see pages 9 to 19 inclusive.

Do. of simpler sections	do.	21 to 31	do.
Comparative price list	-	do.	32 & 33
Extras - - - -	do.		34

NOTE. All sections are made in BRONZE, special estimates will be given.

All corners of our Casements are riveted and brazed.
And all fittings are made on the premises.

Fittings are illustrated on	-	pages 37 to 47	inclusive.
Sashes do.	-	do.	53 to 55 do.
Gearing do.	-	do.	50
Metal Work do.	-	do.	59 to 89 do.
Leaded Lights do.	-	do.	93

GEORGE WRAGGE,

WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES of No. 19 SECTION, registered (see opposite page), in steel, to open outwards. Guaranteed weather-tight.
SPECIFICATIONS to which the price lists below are subject.

SIDE HUNG CASEMENTS.

Casements to have square heads, and prepared to receive glass in one square. All corners riveted and brazed.

No. 1 QUALITY to be fitted with handle No. 84 (see page 37), and with sliding stay No. 94 (see page 47), those casements 4ft. 6in. and up to 5ft. in height to be fitted with sliding bolt securing the light at the top and bottom, and those over 5ft. in height with sliding bolt securing the light at the top, centre, and bottom, working on coinage metal plates. Casements to be hung on hard brass pivots working on lathe-turned steel or bronze centres. All fittings to be of coinage metal, polished and lacquered, toned or bronzed.

No. 2 QUALITY to be fitted with handle No. 84 (see page 37), stay No. 92 and 2 pins (see page 47), and with bolts to casements 4ft. 6in. in height and upwards, and hung on pivots as before described. All fittings to be of coinage metal, plainly filed.

No. 3 QUALITY to be fitted with handle and stay as in No. 2 Quality, and with bolts to casements 4ft. 6in. in height and upwards, and hung on pivots as before described. All fittings to be of malleable iron, with working parts in coinage metal.

NOTE Any other fittings illustrated in this Catalogue can be adopted in preference to the above at *pro rata* prices if desired, or special designs and prices will be submitted.

TOP HUNG CASEMENTS.

No. 1 QUALITY to be fitted with No. 92 stay (see page 47) and 2 pins in coinage metal, polished or bronzed.

No. 2 QUALITY do. do. do. in coinage metal, plainly filed.

No. 3 QUALITY do. do. do. in malleable iron, with coinage metal parts.

Special quotations will be given for rod or other gearing (see page 50).

Casements & Frames, side hung, opening outwards.	Fixed Lights.							
	Height	Width	Quality 1	Quality 2	Quality 3			
2ft. and under	-	2ft. & under	32/-	29/-	28/-	16/-	13/-	5/-
Above 2ft. & under 3ft.	"	"	33/-	30/-	29/-	17/-	13/-	6/-
3ft. and under 3ft. 6in.	"	"	35/-	31/-	30/-	15/-	14/-	6/-
3ft. 6in. and under 4ft.	"	"	37/-	34/-	33/-	20/-	16/-	8/-
4ft. and under 4ft. 6in.	"	"	38/-	35/-	34/-	21/-	17/-	9/-
4ft. 6in. and up to 5ft.	"	"	55/-	50/-	47/-	23/-	18/-	10/-

NOTE For Casements over 5ft. in height add 1/- to page 11. 1/- is used.

Casements and Frames, top hung, to push out.					
Height	Width	Quality 1	Quality 2	Quality 3	
2ft. and under	-	2ft. and under	25/-	24/-	23/-
Above 2ft. & under 2ft. 6in.	"	"	25/-	24/-	24/-
2ft. 6in. and under 3ft.	"	"	26/-	25/-	24/-
3ft. and up to 3ft. 6in.	"	"	30/-	29/-	28/-

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS see page 34. For designs of FITTINGS, see pages 37 to 47.

The above section is made in BRONZE, prices on application.

GEORGE WRAGGE

Wardrobes metal
works Salford
Manchester
22 Surrey St
Strand
London WC
METAL CASEMENTS & FRAMES
in Steel iron & bronze



Guaranteed
weathertight

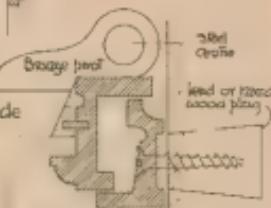
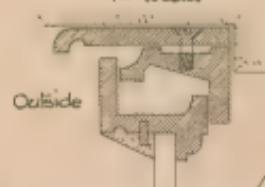
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231581

Section No. 19
in steel

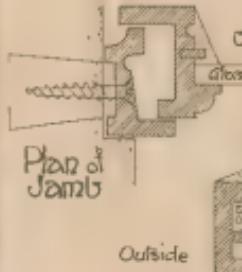
To open @
outwards

Full size @
details

Section
to head



Plan of
Jamb



Plan of
Jamb

Outside



Section
to Cill

NOTE. The above sections are specially adapted for crooked
panes etc., the outer frame being such as to fit in box case or
framed & the straight joints are in ordinary flat sections avoided.



GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMEN TS® FRAMES of No. 20 SECTION, registered (see opposite page), in steel, to open outwards. Guaranteed weather-tight.

The Specification for this section is the same as that given on page 8 both for the side hung and top hung casements.

Height	Width	Casements & Frames, side hung, opening outwards.			Fixed Lights.		
		Quantity 1	Quantity 2	Quantity 3	Quantity 1	Quantity 2	Quantity 3
2ft. and under	2ft. & under	39/6	35/-	34/-	20/-	15/-	5/6
Above 2ft. & under 3ft.	" "	39/0	36/-	35/-	21/-	15/6	6/-
3ft. & under 3ft. 6in.	" "	41/-	37/6	36 0	22/-	16/-	6/6
3ft. 6in. & under 4ft.	" "	43/6	40/-	39/-	24/-	18/-	8/-
4ft. & under 4ft. 6in.	" "	44/6	41/-	40/-	25/-	19/-	9/-
4ft. 6in. to 5ft.	" "	62/6	57/6	55/-	27/-	20/-	10/-
Above 5ft. & up to 6ft.	" "	72/6	67/6	65/-	30/-	22/0	12/-

NOTE: Casements of this section have been successfully made up to 7ft. in height.

Casements & Frames, top hung to push out				
Height	Width	Quantity 1	Quantity 2	Quantity 3
2ft. and under	2ft. & under	31/-	30/-	29/6
Above 2ft. & under 2ft. 6in.	" "	31/6	30/6	30/-
2ft. 6in. and under 3ft.	" "	32/-	31/-	30/6
3ft. and up to 3ft. 6in.	" "	36/-	35/-	34/6

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS see page 34. For designs of FITTINGS, see pages 37 to 47.

The above section is made in BRONZE, prices on application.

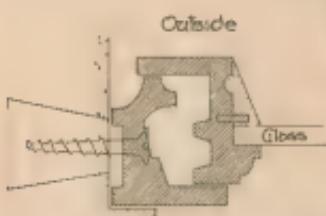
Wardy metal
works, Salford
Manchester

GEORGE WRAGGE

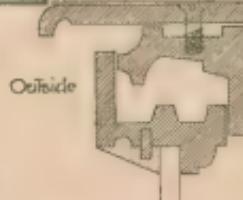
22 Surrey St
Strand
London W.C



Guaranteed
weathertight



Plan of
Jamb

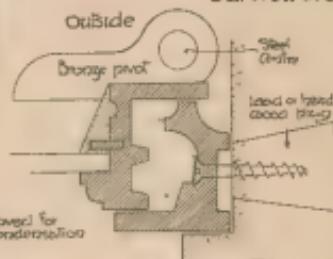


Full size
details



Section
No. CIII

To open @
outwards



Plan of
Jamb

Reg. No. @
273662

NOTE: The above sections are specially adapted for grooved jambs etc., the outer frame being SUMK, so that a box can be fitted & the straight joint as in ordinary flat sections avoided.



GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES OF No. 21 SECTION, registered (see opposite page), in steel, to open inwards. Guaranteed weather-tight.

The Specification for this section is the same as that given on page 8 for the side hung casements, excepting that they are fitted with slide bolts 4ft. and upwards in height, and the stays are an adaptation of No. 94 (see page 47).

Casements & Frames, side hung, opening inwards.					Fixed Lights.		
Height.	Width	Q. of 1	Q. of 2	Q. of 3	Angle Iron	Angle Iron	
2ft. and under - -	2ft. & under	43/6	40/-	39/-	20/-	15/-	5/6
Above 2ft. & under 3ft.	" "	44/6	41/-	40/-	21/-	15/6	6/-
3ft. & under 3ft. 6in.	" "	46/6	42/6	41/6	22/-	16/-	6/6
3ft. 6in. & under 4ft.	" "	48/6	45/-	44/-	24/-	18/-	8/-
4ft. & under 4ft. 6in.	" "	67/6	62/6	60/-	25/-	19/-	9/-
4ft. 6in. to 5ft. - -	" "	70/-	65/-	62/6	27/-	20/-	10/-
Above 5ft. & up to 6ft.	" "	77/6	72/6	70/-	30/-	22/6	12/-

NOTE. Casements of this section have been successfully made up to 10ft. high.
The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS see page 34. For designs of FITTINGS, see pages 37 to 47.
The above section is made in BRONZE, prices on application.

GEORGE WRAGGE

Wardrobe metal
works Salford
Manchester
22 Surrey St.
Strand
London WC
METAL CASEMENTS & FRAMES
in Steel iron & bronze



Full View

Guaranteed
weatherlight

Reg. No. 274249
273665
273662

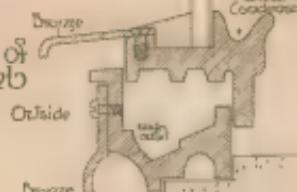
Section No. 21
rolled solid to Steel

Section
at head

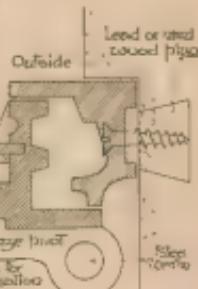
Full size &
details

To open
inwards
or fall back
from sill

Plan of
Damb



Plan of
Damb



Section
at Sill

NOTE. The above sections are specially suitable for grooved joints at the outer frame being fitted in a box case be fitted in the straight joint on to ordinary flat sections provided



GEORGE WRAGGE

WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES OF No. 22 SECTION, registered (see opposite page), in steel, to swing on centres. Guaranteed weather-tight.

Specification to which the price list below is subject.

All Casements prepared to receive glass in one square & with square heads, to be riveted and brazed and hung on coinage metal rule jointed centres, with steel pin, and fitted with eyes at top and pulley and eye at bottom, to open and close by cords.

NOTE. Special quotations will be given for rod or other gearing (see page 50).

Casements & Frames, centre hung.				
Height	Width	Circular		
1ft. and under - -	2ft. and under	36/6	44/-	
2ft. and under 2ft. 6in. -	" "	37/6	45/-	
2ft. 6in. and under 3ft. -	" "	38/6	47/6	
3ft. and up to 4ft. - -	" "	42/6	52/6	

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS, see page 34. For designs of FITTINGS, see pages 37 to 47. The above section is made in BRONZE, prices on application.

GEORGE WRAGGE

Wardrobe metal
works Salford
Manchester

22 Sunney St
Strand
London W.C.

METAL CASEMENTS & FRAMES
in Steel iron & bronze



Guaranteed
weathertight

Reg No. 273662

Section No. 22
in steel

Section
top head

Full size &
details

To swing
on Cossage
metal centres

Plan of
clambs
below centre

Outside

End of
end clambs
plan

Plan of
clambs
above centre



Section
in Cill

NOTE. The above sections are specially adapted for grooved
clambs etc. the outer frame being built so that a box can be
placed in the straight joints, as in ordinary flat sections, provided



GEORGE WRAGGE

WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES OF No. 23 SECTION, registered (see opposite page), in steel, hung at cill, to fall inwards. Guaranteed weathertight.

Specification to which the price list below is subject.

All casements to have square heads to be prepared to receive glass in one square, all corners riveted and brazed, and hung on hard brass pivots fitted with lathe-turned centres in steel or bronze.

No. 1 QUALITY, to be fitted with folding coinage metal side guides, pulleys and eyes for cords.

No. 2 QUALITY, to be fitted with malleable iron projecting side guides, pulleys and eyes for cords.

NOTE. Special quotations will be given for rod or other gearing (see page 50).

Casements and Frames hung at cill, to fall back.			
Height.	Width	Quality 1.	Quality 2.
2ft. and under	2ft. and under	37/-	33/-
Above 2ft. & under 2ft. 6in.	" "	40/-	35/-
2ft. 6in. and under 3ft.	" "	41/-	37/-
3ft. and up to 3ft. 6in.	" "	45/-	40/-

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS, see page 34. For designs of FITTINGS, see pages 37 to 47. The above section is made in BRONZE, prices on application.

GEORGE WRAGGE

Wardry metal works Salford
 Manchester 22 Sunney St
 Strand London WC
 METAL CASEMENTS & FRAMES
 in Steel iron & bronze



Guaranteed
 weatherlight

Reg. No. 274249
 273663
 273662

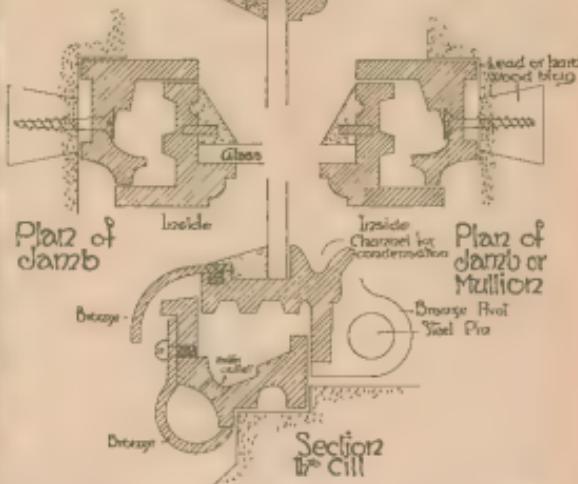
Section No. 23
 in Steel

Full size &
 details

To fall back
 from sill &
 hinge at side
 as No. 21

Section
 in Lead

Inside



NOTE: The above sections are specially adapted for grooved
 jamb etc. The outer frame being SUNK so that a bar can be
 fitted & the slight joint as in ordinary flat sections avoided



GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES of No. 24 SECTION, registered (see opposite page), in steel, to open outwards, hung double folding, WITHOUT CENTRE MEETING RAIL. Guaranteed weather tight

SPECIFICATION to which the price list below is subject.

Casements to have square heads, and prepared to receive glass in one square. All corners riveted and brazed.

No. 1 QUALITY, to be fitted with 2 handles No. 86 (see page 37), 2 small bolts, one top and bottom, and 2 sliding stays No. 94 (see page 47); those casements 4ft. 6in. in height and upwards to be fitted with Espagnolette bolt securing the two frames at the top, centre and bottom in one movement. Casements to be hung on hard brass pivots working on lathe-turned steel or bronze centres. All fittings to be of coinage metal, polished and lacquered, toned or bronzed

No. 2 QUALITY, to be fitted with 2 handles No. 84 (see page 37), 2 small bolts, one top and bottom, and 2 stays No. 92 with 2 pins (see page 47); those casements 4ft. 6in. in height and upwards to be fitted with Espagnolette bolt as before described, and hung on pivots as above. All fittings to be of coinage metal, plainly filed.

No. 3 QUALITY, to be fitted with handles and stays as in No. 2 quality and with our ordinary pattern sliding bolt to casements 4ft. 6in. and upwards in height. All fittings to be of malleable iron with working parts in coinage metal.

NOTE. Any other fittings illustrated in this Catalogue can be adopted in preference to the above at *pro rata* prices if desired, or special designs and prices will be submitted.

When casements are required as doors, stays are not used, and their value (see page 46) is deducted from this price list.

Casements and frames to open outwards, hung double folding (without centre meeting rail).					Fixed Lights.		
Height	Width Over the two casements	Qua. 1	Qua. 2	Qua. 3	Size up to 12ft. 10in. in height	Qua. 1 in name of the light and price of each square foot	Angle iron
2ft. and under	4ft. 6in. & under	72/6	62/6	59/6	32/6	20/-	10/-
Above 2ft. & under 3ft 6in	" "	80/-	70/-	67/-	37/6	23/6	11/-
" 3ft. 6in. & under 4ft 6in	" "	87/6	77/6	74/6	40/6	25/-	12/6
4ft. 6in. and up to 6ft.	" "	125/-	115/-	100/-	50/-	31/6	17/6
Above 6ft. & under 6ft. 6in.	" "	150/-	140/-	125/-	62/6	38/6	20/-
6ft. 6in. and under 7ft.	" "	160/-	150/-	135/-	67/6	41/-	22/-
7ft. and under 8ft.	" "	170/-	160/-	145/-	72/6	45/-	24/6
8ft. and under 9ft.	" "	180/-	170/-	155/-	77/6	47/6	27/-
9ft. and up to 10ft.	" "	190/-	180/-	165/-	82/6	50/-	29/-

NOTE. For casements opening INWARDS in pairs, and without centre meeting rail (section No. 21A), add 10/- to the above price list. The prices of the fixed lights will remain as above.

The prices of each set of fittings illustrated in this Catalogue are grouped together on pages 32 & 33, so that a comparison can at once be made. For complete list of EXTRAS see page 34. For designs of FITTINGS, see pages 37 to 47.

The above section is made in BRONZE, prices on application.

Wardy metal
works Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C



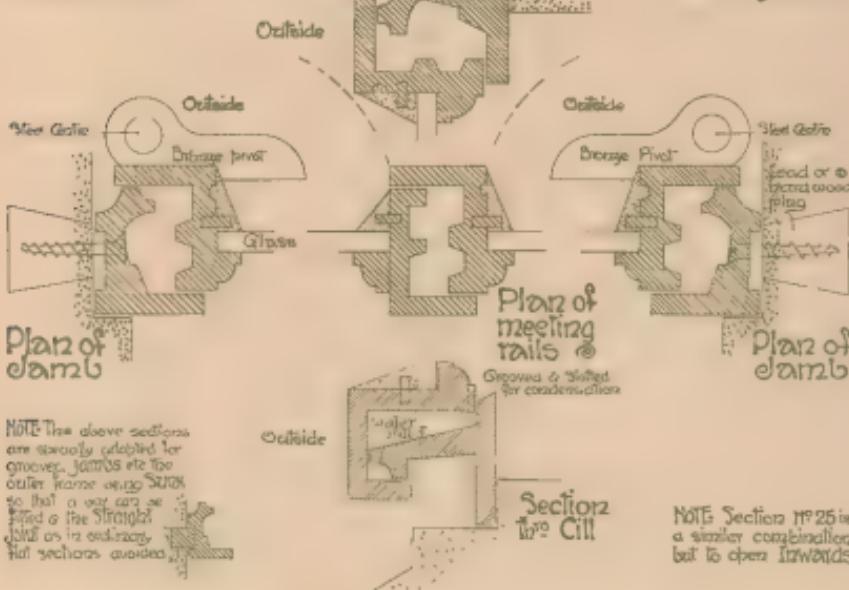
Section N° 24
in Steel

Guarded
Weatherlight

Reg. N° 273662

To open outwards
in pairs without
fixed meeting rail

full size details



NOTE: The above sections
are specially calculated for
grooves, jambes etc to
fit other frames or to such
size that a door can be
fitted to the straight
jamb as in ordinary
half sections avoided.

NOTE: Section N° 25 is
a smaller combination
but to open inwards

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES of No. 4 SECTION (see opposite page) in wrought iron, to open outwards. Weather tight under ordinary conditions. SPECIFICATION to which the price list below is subject.

SIDE HUNG CASEMENTS.

Casements to have $\frac{1}{2}$ square heads, and prepared to receive glass in one square. All corners riveted and brazed.

No. 2 QUALITY, to be fitted with handle No. 84 (see page 37), and stay with two pins, No. 92 (see page 47), of coinage metal, plainly filed.

No. 3 QUALITY, to be fitted with similar fittings, but in malleable iron, having coinage metal working parts.

TOP HUNG CASEMENTS.

No. 2 QUALITY, to be fitted with No. 92 stay and 2 pins (see page 47), in coinage metal, plainly filed.

No. 3 QUALITY, to be fitted with No. 92 stay and 2 pins (see page 47), in malleable iron, with coinage metal parts.

Casements & Frames, side hung, opening outwards.				Fixed Lights.		
Height	Width	Quality 2	Quality 3			Angle Iron
2ft. and under -	2ft. & under	24/-	28/-	15/-	12/-	5/-
Above 2ft. & under 3ft.	" "	3/-	29/-	16/-	13/-	6/-
3ft. and under 3ft. 6in.	" "	31/-	30/-	17/-	14/-	6/-
3ft. 6in. and under 4ft.	" "	32/-	31/-	19/-	15/-	8/-
4ft. and under 4ft. 6in.	" "	34/-	33/-	20/-	16/-	9/-
4ft. 6in. and up to 5ft.	" "	35/-	47/-	22/-	17/-	10/-

NOTE: This section is not recommended for Casements over 5ft. high.

Casements & Frames, top hung, to push out.			
Height	Width.	Quality 2	Quality 3
2ft and under - - -	2ft. and under	25/-	25/-
Above 2ft. and under 2ft. 6in.	" "	26/-	25/-
2ft. 6in. and under 3ft. -	" "	27/-	26/-
3ft. and up to 3ft. 6in. -	" "	28/-	28/-

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS, see page 34. For designs of FITTINGS, see pages 37 to 47.

The above section is made in BRONZE, prices on application.

GEORGE WRAGGE

Wardle metal
works Salford
Manchester

22 Surrey St
Strand
London W.C.

METAL CASEMENTS & FRAMES
in Steel iron & bronze



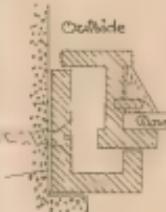
Weatherlight
under
ordinary
conditions

Section N^o 4
1/2 in. thick

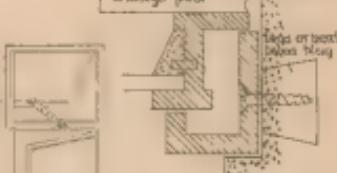
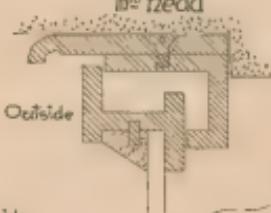
To open
outwards

Section
at the head

Full Size
at details



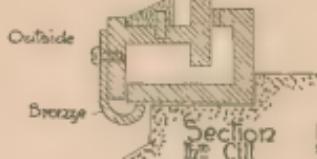
Plan of
jamb



Plan of
jamb



Elevation



Section
at the sill

NOTE: This specimen
will be prepared
to sent any details.

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES of No. 5 SECTION (see page 33) in wrought iron, to open outwards. Weather-tight under ordinary conditions
SPECIFICATIONS to which the price lists below are subject.

SIDE HUNG CASEMENTS.

Casements to have square heads, and prepared to receive glass in one square. All corners riveted and brazed.

No. 2 QUALITY, to be fitted with handle No. 84 (see page 37), and stay with two pins, No. 92 (see page 47), of coinage metal, plainly filed.

No. 3 QUALITY, to be fitted with similar fittings, but in malleable iron, having coinage metal working parts.

NOTE. Any other fittings illustrated in this Catalogue can be adopted in preference to the above at *pro rata* prices if desired, or special designs and prices will be submitted.

Casements & Frames, side hung, opening outwards.	Width	Fixed Lights.		
		Height	Width	Angle Inches
2ft. and under -	2ft. & under	26/-	25/-	13/- 11/6 5/6
Above 2ft. & under 3ft.	" "	27/-	26/-	14/- 12/- 6/-
3ft. and under 3ft. 6in.	" "	28/-	27/-	15/- 12/6 6/6
3ft. 6in. and under 4ft.	" "	29/-	29/-	17/- 14/6 8/-
4ft. and under 4ft. 6in.	" "	31/-	30/6	18/- 15/6 9/-

NOTE. This section is not recommended for Casements over, say, 4ft. 6in. in height.

TOP HUNG CASEMENTS.

No. 2 QUALITY, to be fitted with No. 92 stay and 2 pins (see page 47), in coinage metal, plainly filed.

No. 3 QUALITY, to be fitted with No. 92 stay and 2 pins (see page 47), in malleable iron, with coinage metal parts.

NOTE. Special quotations will be given for rod or other gearing (see page 50).

Casements & Frames, top hung, to push out.			
Height.	Width	Quality 2.	Quality 3.
2ft. and under - - -	2ft. and under	23/6	23/-
Above 2ft. and under 2ft. 6in.	" "	24/-	23/6
2ft. 6in. and under 3ft. -	" "	25/-	24/6
3ft. and up to 3ft. 6in. - -	" "	26/6	26/-

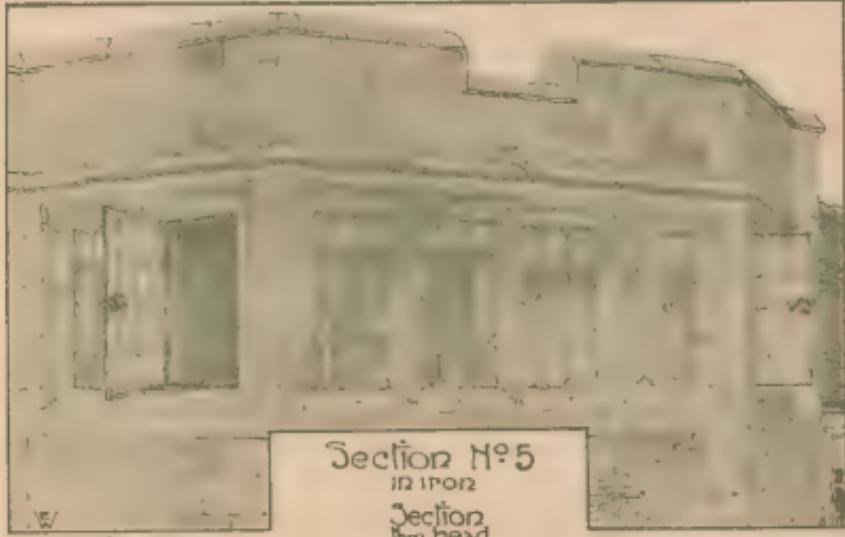
The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS see page 34. For designs of FITTINGS, see pages 37 to 47.

The above section is made in BRONZE, prices on application.

Wardy metal
works Salford
Manchester

GEORGE WRAGGE

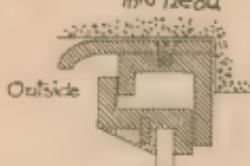
22 Surrey St
Strand
London W.C



Section N°5

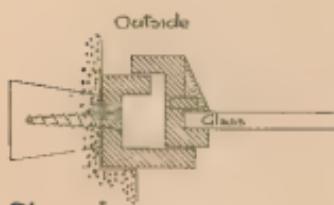
in IRON

Section
thro head

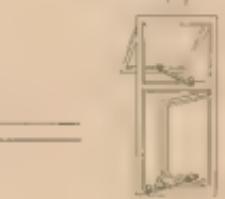


Weatherlight
under
ordinary
conditions

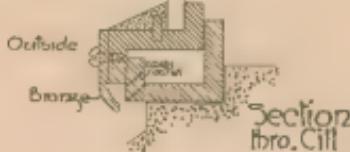
Full Size
& details
to open &
outwards



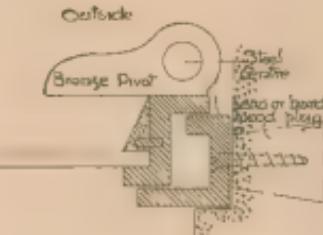
Plan of
Jamb



Elevation



Section
thro. Cill



Plan of
Jamb

NOTE this Component
can be prepared
to suit any diameter

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMFNTS & FRAMES of No. 8 SECTION (see opposite page), in wrought iron, to open inwards. Weather tight under ordinary conditions. SPECIFICATION to which the price list below is subject. Casements to have square heads, and prepared to receive glass in one square. All corners riveted and brazed.

No. 2 QUALITY, to be fitted with handle No. 84 (see page 37), and hook stay with 2 eyes No. 93 (see page 47), or coinage metal, plainly filed.

No. 3 QUALITY, to be fitted with similar fittings, but in malleable iron, having coinage metal working parts.

NOTE. Any other fittings illustrated in this Catalogue can be adopted in preference to the above at *pro rata* prices if desired, or special designs and prices will be submitted.

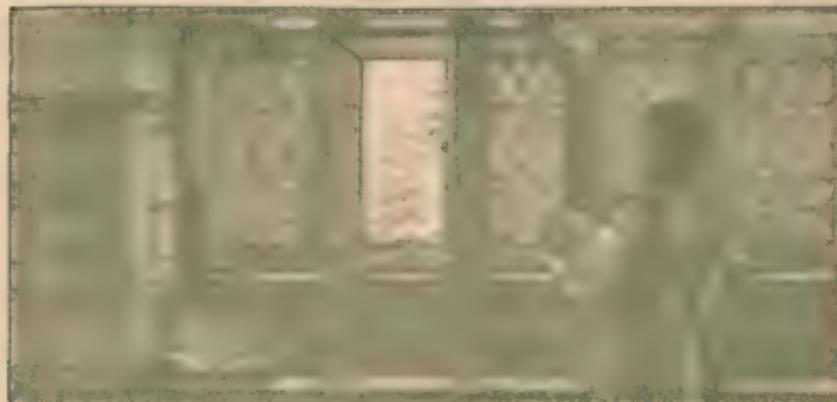
Casements & Frames, side hung, opening inwards.				Fixed Lights.		
Height	Width	Quality	Q. lbs	Width of the frame	Width of the glass in the Casement	Avg. lbs
2ft. and under	2ft. & under	27/6	26/6	13/	11/6	5/6
Above 2ft. & under 3ft.	" "	28/6	27/6	14/	12/	6/-
3ft. and under 3ft. 6in.	" "	29/6	28/6	15/	12/6	6/6
3ft. 6in. and under 4ft.	" "	31/6	30/6	17/	14/6	8/-
4ft. and under 4ft. 6in.	" "	33/-	32/-	18/	15/6	9/-

NOTE. This section is not recommended for Casements over, say, 4ft. 6in. in height. The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS see page 34. For designs of FITTINGS, see pages 37 to 47. The above section is made in BRONZE, prices on application.

Wardy metal
works Salford
Manchester

GEORGE WRAGGE

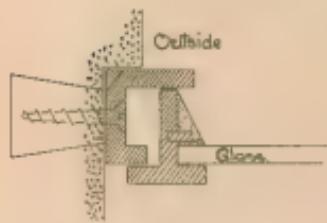
22 Surrey St
Strand
London W.C



Weatherlight
under
ordinary
conditions

Section No 8
in Iron

Full size
@
details
to open
inwards

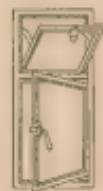


Plan of
Jamb

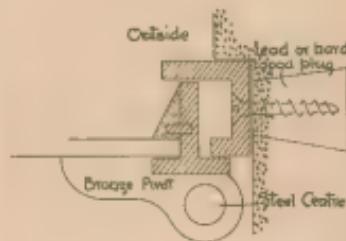


Section
through head

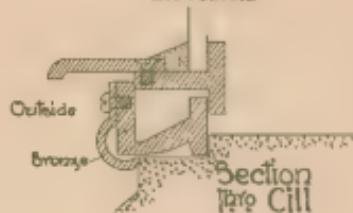
Outside



Elevation



Plan of
Jamb



Section
through Cill

NOTE: This Cement
can be prepared
to suit any details

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS & FRAMES of Nos. 9 & 10 SECTIONS (see opposite page) in wrought iron, hung at cill, to fall inwards. No. 9 Section is guaranteed weather-tight, and No. 10 is weather-tight under ordinary conditions.

Specification to which the price lists below are subject.

Casements to have square heads, and prepared to receive glass in one square. All corners riveted and brazed.

No. 1 QUALITY, to be fitted with folding coinage metal side guides, pulleys and eyes for cords.

No. 2 QUALITY, to be fitted with malleable iron projecting side guides, pulleys and eyes for cords.

NOTE. Special quotations will be given for rod or other gearing (see page 50).

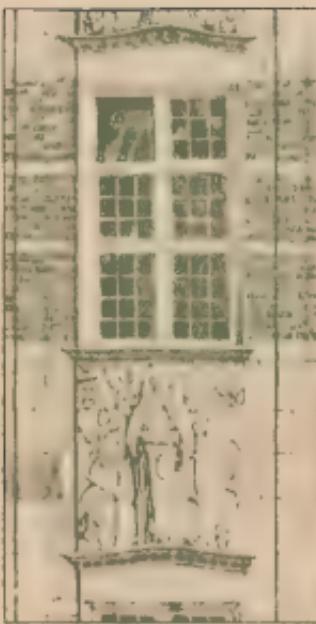
SECTION No 9.			
Casements and Frames hung at cill, to fall inwards.			
Height.	Width	Quality 1.	Quality 2.
2ft. and under - - -	2ft. and under	25/-	22/-6
Above 2ft. and under 3ft. - - -	" "	26/-	23/-6
3ft. and up to 3ft. 6in. - - -	" "	28/-6	26/-
Above 3ft. 6in. and up to 4ft. - - -	" "	32/-	29/-6

SECTION No 10.			
Casements and Frames hung at cill, to fall inwards.			
Height	Width	Quality 1.	Quality 2.
2ft. and under - - -	2ft. and under	23/-	20/-6
Above 2ft. and under 3ft. - - -	" "	24/-	21/-6
3ft. and up to 3ft. 6in. - - -	" "	26/-6	24/-
Above 3ft. 6in. and up to 4ft. - - -	" "	3	27/-6

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS, see page 34. For designs of FITTINGS, see pages 37 to 47. The above sections are made in BRONZE, prices on application.

GEORGE

Wardy metal
works Salford
Manchester

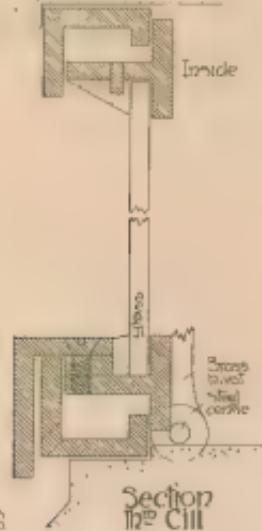


Section N°9
for transom
lights only

To pivot at Cill
and fall back

Full size

Section
the Head



Patent
wood

Note: Some depth of
recess of sides to
receive at head

Note: These sections
can be prepared to
suit any details

WRAGGE

22 Surrey St
Strand
London W.C

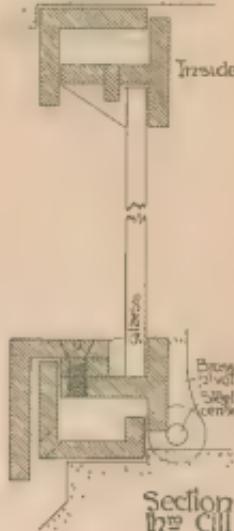


Section N°10
for transom
lights only

To pivot at Cill
and fall back

Full size:

Section
the Head



Section
the Cill

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS AND FRAMES of Nos. 11, 12, and 12a SECTIONS see opposite pages, in wrought iron, to swing on centres. No. 12 section is guaranteed weather-tight. Nos. 11 and 12a are weather-tight under ordinary conditions.

SPECIFICATION to which the price lists below are subject.

Casements prepared to receive glass in one square, and with square heads. All corners to be riveted and brazed, hang on coinage metal turned centres, and fitted with eyes at top, and pulleys and eyes at bottom, to open and close by cords.

NOTE. Special quotations will be given for rod or other gearing (see page 50).

Section No. 12a.			Section No. 11			Section No. 12.		
Casements & frames in wrought iron			1 pair top centres			Casements & frames in wrought iron		
Height	Width		Height	Width		Height	Width	
2ft. and under	2ft. & under	15	Same heights as Section 12a.	20	2ft. and under	2ft. & under	25	
2ft. & under 2ft. 6	2ft. & under	16	Same widths as Section 12a.	21	2ft. & under 2ft. 6	2ft. & under	24	
2ft. 6 & under 3ft.	2ft. 6 & under	17	Same widths as Section 12a.	22	2ft. 6 & under 3ft.	2ft. 6 & under	23	
2ft. and up to 3ft.	2ft. and up to	18		23/6		"	"	
				25/-				
Circular Casements.			Circular Casements.			Circular Casements.		
Section No. 12a.			Section No. 11.			Section No. 12.		
2ft. and under	2ft. & under	19/-	2ft. and under	2ft. & under	25/-	2ft. and under	2ft. & under	28/-
Abv. 2ft. & under 2ft. 6	2ft. & under	20/-	Abv. 2ft. & under 2ft. 6	2ft. & under	26/-	Abv. 2ft. & under 2ft. 6	2ft. & under	28/6
2ft. 6 and under 3ft.	2ft. 6 and under	22/6	2ft. 6 and under 3ft.	2ft. 6 and under	30/-	2ft. 6 and under 3ft.	2ft. 6 and under	31/6

*Heavier Section.

The prices of each section illustrated in this Catalogue are grouped together on pages 32 & 33, so that easy comparison can at once be made. For complete list of EXTRAS, see page 34. For designs of FITTINGS, see pages 37 to 47. The above sections are made in BRONZE, prices on application.

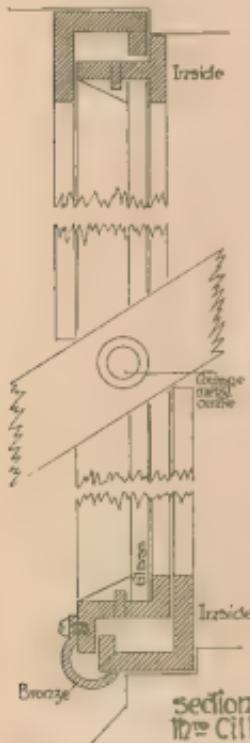
Wardy metal
works Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C

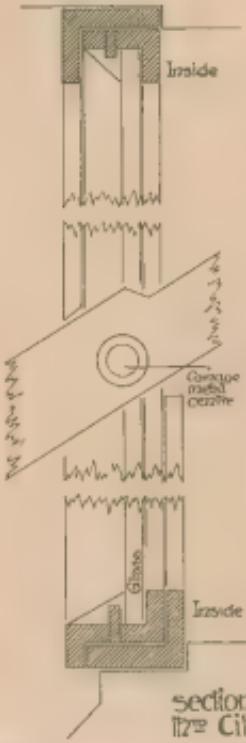
Section № 12

To pivot
on centres
Full size
details :
Section
the head



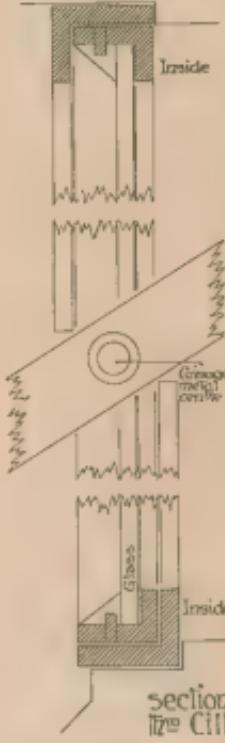
Section № 11

To pivot
on centres
Full size
details :
Section
the head



Section № 12a

To pivot
on centres
Full size
details :
Section
the head



NOTE: The same depth of rebate is required
at the sides as shown at head and cill

These casements can be
made to suit any details

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

CASEMENTS of Nos. 26, 27, 28, 29, 30 & 31 SECTIONS (see opposite page). Sections 26 & 27 in steel, 16 to 18 in wrought iron. Sections 26, 28 & 29 (with loose slips) if properly fixed are weather tight under ordinary conditions, and make very satisfactory casements.

SPECIFICATION to which the price list below is subject

Casements to have 8, 12, 14 heads & prepared to receive glass in one square. All corner riveted and brazed.

No. 1 QUALITY, to be fitted with solid brass butt hinges, handle No. 54, see page 57, and stay with two pins No. 92, see page 47, in manganese metal, plain riveted.

No. 3 QUALITY, to be fitted with iron butt hinges, handle, and stay with two pins, of good design, in malleable iron.

NOTE. Any other fittings illustrated in this Catalogue can be adopted in preference to the above at *pro rata* prices if desired, or special designs and prices will be submitted.

SECOND QUALITY.

Height.	Width	SECTIONS					
		26	27	28	29	30	31
2ft. and under	2ft. & under	16/-	17/-	18/-	18/-	15/-	14/-
Avg. 2ft. and under 3ft.	" "	17/-	18/-	19/-	19/-	16/-	16/-
3ft. and under 3ft. 6in.	" "	22/-	18/-	19/-	20/-	17/-	17/-
3ft. 6in. and under 4ft.	" "	23/-	20/-	21/-	21/-	19/-	18/-
4ft. and up to 4ft. 6in.	" "	24/-	21/-	22/-	22/-	19/-	19/-

THIRD QUALITY.

Height.	Width	SECTIONS					
		26	27	28	29	30	31
2ft. and under	2ft. & under	17/-	14/-	15/-	15/-	12/-	12/-
Avg. 2ft. and under 3ft.	" "	18/-	15/-	16/-	16/-	13/-	13/-
3ft. and under 3ft. 6in.	" "	19/-	16/-	17/-	17/-	14/-	14/-
3ft. 6in. and under 4ft.	" "	20/-	17/-	18/-	18/-	15/-	15/-
4ft. and up to 4ft. 6in.	" "	21/-	18/-	19/-	19/-	16/-	16/-

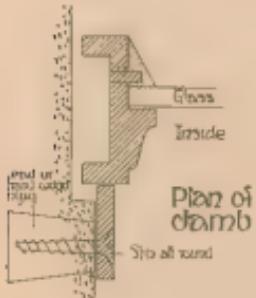
NOTE. For prices of hopper and sliding casements, etc., etc., see page 48. The prices of each section illustrated in this Catalogue are grouped together on pages 12 and 13. All casements shown can be made to order. For complete list of EXTERNS see page 34. For designs of FITTINGS, see pages 37 to 47. The above sections are made in BRONZE, prices on application.

Wardy metal
works Salford
Manchester

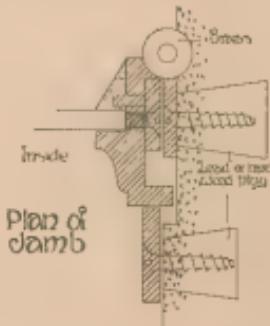
GEORGE WRAGGE

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London W.C

Section N° 26



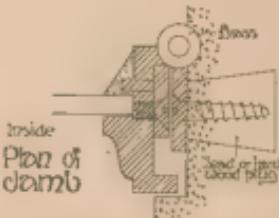
Full size
details
to hinge
at side
to open
outwards
Same rebate
bend & all
screws



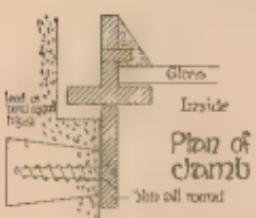
Section N° 27



Full size
details
to hinge
at side
to open
outwards
Same rebate &
bend & all bottom
corners bent

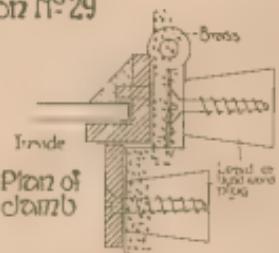


Section N° 28

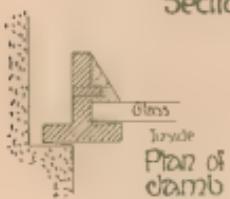


Full size
details
to hinge
at side
to open
outwards
Same rebate &
bend & all bottom
corners bent

Section N° 29

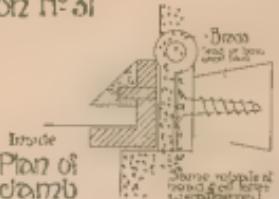


Section N° 30



Full size
details
to hinge
at side
to open
outwards
Same rebate &
bend & all bottom
corners bent

Section N° 31



GEORGE WRAGGE,

WARDRY METAL WORKS, Salford, MANCHESTER.

The tables below give the prices of the whole of the casements illustrated in this Catalogue, so that a comparison can easily be arrived at, & opposite each illustration a complete specification of the fittings, etc., is given.

SIDE HUNG CASEMENTS. FIRST QUALITY.

HEIGHT.	WIDTH.	N. 1	N. 2	N. 3	N. 4	N. 5	N. 6	N. 7	N. 8
2ft. and under	2ft. and under	2/-	3/-	3/-	3/-	3/-	3/-	3/-	3/-
Above 2ft. and under 3ft.	-	-	3/-	3/-	3/-	3/-	3/-	3/-	3/-
3ft. and under 3ft. 6in.	-	-	4/-	4/-	4/-	4/-	4/-	4/-	4/-
3ft. 6in. and under 4ft.	-	-	5/-	5/-	5/-	5/-	5/-	5/-	5/-
4ft. and under 4ft. 6in.	-	-	6/-	6/-	6/-	6/-	6/-	6/-	6/-
4ft. 6in. to 5ft.	-	-	7/-	7/-	7/-	7/-	7/-	7/-	7/-
Above 5ft. and up to 6ft.	-	-	-	-	-	-	8/-	8/-	8/-
EXTRAS.									
2ft. and under	2ft. and under	N. 9	N. 10	N. 11	N. 12	N. 13	N. 14	N. 15	N. 16
Above 2ft. and under 3ft.	-	-	Not priced in this quality.	-	Not priced in this quality.	-	Not priced in this quality.	-	Not priced in this quality.
3ft. and under 3ft. 6in.	-	-	-	-	10/-	10/-	10/-	10/-	10/-
3ft. 6in. and under 4ft.	-	-	-	-	11/-	11/-	11/-	11/-	11/-
4ft. and under 4ft. 6in.	-	-	-	-	12/-	12/-	12/-	12/-	12/-
4ft. 6in. to 5ft.	-	-	-	-	13/-	13/-	13/-	13/-	13/-
Above 5ft. and up to 6ft.	-	-	-	-	14/-	14/-	14/-	14/-	14/-

SECOND QUALITY.

HEIGHT.	WIDTH.	N. 1	N. 2	N. 3	N. 4	N. 5	N. 6	N. 7	N. 8
2ft. and under	2ft. and under	2/-	3/-	3/-	40/-	7/-	7/-	7/-	2/-
Above 2ft. and under 3ft.	-	-	3/-	4/-	40/-	10/-	10/-	10/-	2/-
3ft. and under 3ft. 6in.	-	-	4/-	5/-	42/-	11/-	11/-	11/-	2/-
3ft. 6in. and under 4ft.	-	-	5/-	6/-	45/-	12/-	12/-	12/-	2/-
4ft. and under 4ft. 6in.	-	-	6/-	7/-	47/-	13/-	13/-	13/-	2/-
4ft. 6in. to 5ft.	-	-	7/-	8/-	50/-	14/-	14/-	14/-	2/-
Above 5ft. and up to 6ft.	-	-	8/-	9/-	53/-	15/-	15/-	15/-	2/-
HEIGHT.									
2ft. and under	2ft. and under	N. 9	N. 10	N. 11	N. 12	N. 13	N. 14	N. 15	N. 16
Above 2ft. and under 3ft.	-	-	1/-	1/-	1/-	1/-	1/-	1/-	1/-
3ft. and under 3ft. 6in.	-	-	2/-	2/-	2/-	2/-	2/-	2/-	2/-
3ft. 6in. and under 4ft.	-	-	2/-	2/-	2/-	2/-	2/-	2/-	2/-
4ft. and under 4ft. 6in.	-	-	2/-	2/-	2/-	2/-	2/-	2/-	2/-
4ft. 6in. to 5ft.	-	-	2/-	2/-	2/-	2/-	2/-	2/-	2/-
Above 5ft. and up to 6ft.	-	-	-	-	-	-	-	-	-

THIRD QUALITY.

HEIGHT.	WIDTH.	N. 1	N. 2	N. 3	N. 4	N. 5	N. 6	N. 7	N. 8
2ft. and under	2ft. and under	2/-	3/-	3/-	3/-	3/-	3/-	3/-	2/-
Above 2ft. and under 3ft.	-	-	3/-	3/-	3/-	3/-	3/-	3/-	2/-
3ft. and under 3ft. 6in.	-	-	3/-	3/-	3/-	3/-	3/-	3/-	2/-
3ft. 6in. and under 4ft.	-	-	3/-	3/-	3/-	3/-	3/-	3/-	2/-
4ft. and under 4ft. 6in.	-	-	3/-	3/-	3/-	3/-	3/-	3/-	2/-
4ft. 6in. to 5ft.	-	-	3/-	3/-	3/-	3/-	3/-	3/-	2/-
Above 5ft. and up to 6ft.	-	-	-	-	-	-	-	-	-
HEIGHT.									
2ft. and under	2ft. and under	N. 9	N. 10	N. 11	N. 12	N. 13	N. 14	N. 15	N. 16
Above 2ft. and under 3ft.	-	-	1/-	1/-	1/-	1/-	1/-	1/-	1/-
3ft. and under 3ft. 6in.	-	-	1/-	1/-	1/-	1/-	1/-	1/-	1/-
3ft. 6in. and under 4ft.	-	-	1/-	1/-	1/-	1/-	1/-	1/-	1/-
4ft. and under 4ft. 6in.	-	-	1/-	1/-	1/-	1/-	1/-	1/-	1/-
4ft. 6in. to 5ft.	-	-	1/-	1/-	1/-	1/-	1/-	1/-	1/-
Above 5ft. and up to 6ft.	-	-	-	-	-	-	-	-	-

For complete list of extras, see page 34. For designs of fittings, see pages 37 to 47. For prices of hopper, sliding casements, etc. see page 53.

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

TOP HUNG CASEMENTS, to push out. FIRST QUALITY.

HEIGHT.	WIDTH.	No. 19.	No. 20.	No. 4.	No. 5.
1ft. and under -	2ft. and under	25/-	31/-	Not priced in this quality.	Not priced in this quality.
Above 2ft. and under 2ft. 6in. -	" "	25/-	31/-		
2ft. 6in. and under 3ft. -	" "	26/-	32/-		
3ft. and up to 3ft. 6in. -	" "	30/-	30/-		

SECOND QUALITY.

HEIGHT.	WIDTH.	No. 14.	No. 20.	No. 4.	No. 5.
2ft. and under -	2ft. and under	24	30	25 6	27 6
Above 2ft. and under 2ft. 6in. -	" "	24 6	30 6	26	28
2ft. 6in. and under 3ft. -	" "	25	31	27	29
3ft. and up to 3ft. 6in. -	" "	29	35	28 6	30 6

THIRD QUALITY.

HEIGHT.	WIDTH.	No. 19.	No. 20.	No. 4.	No. 5.
2ft. and under -	2ft. and under	23 f	29 6	25	23
Above 2ft. and under 2ft. 6in. -	" "	24	30	25 6	23 6
2ft. 6in. and under 3ft. -	" "	24 6	30 6	26	24 6
3ft. and up to 3ft. 6in. -	" "	28 6	34 6	28	26

BOTTOM HUNG CASEMENTS, to fall back. FIRST QUALITY.

HEIGHT.	WIDTH.	No. 21.	No. 9.	No. 10.
1ft. and under -	2ft. and under	17 6	25	23 -
Above 2ft. and under 3ft. -	" "	21 6	26	24 -
3ft. and up to 3ft. 6in. -	" "	25	28 6	26 6
Above 3ft. 6in. and up to 4ft. -	" "	28 6	32	30

SECOND QUALITY.

HEIGHT.	WIDTH.	No. 23.	No. 9.	No. 10.
2ft. and under -	2ft. and under	17	22 6	20 6
Above 2ft. and under 3ft. -	" "	17	23 6	21 6
3ft. and up to 3ft. 6in. -	" "	20 6	26	24
Above 3ft. 6in. and up to 4ft. -	" "	24	29 6	27 6

CENTRE HUNG CASEMENTS.

HEIGHT.	WIDTH.	No. 22.	No. 11.	No. 12.	No. 12a.
1ft. and under -	2ft. and under	36 6	20	23	15
2ft. and under 2ft. 6in. -	" "	37 6	21	24	16
2ft. 6in. and under 3ft. -	" "	38 6	23 6	25 6	17 6
3ft. and up to 4ft. -	" "	42 6	25		19

For complete list of extras, see page 34. For designs of fittings, see pages 37 to 47. For prices of hopper, sliding casements, etc., see page 48.

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

EXTRAS.

SHAPED HEADS AND CURVED ON PLAN.

Casements & Frames, and Fixed Lights of two frames.			Fixed Lights of one frame.			
Section	Sash Frame Cills or Jamb	Tin Cills	Giving same pane of glass and sight line as casement		Angle Irons.	
			Sash Frame Cills or Jamb	Tin Cills	Sash Gothic, or Circular Cills	Tin Cills
N. 6						
10, 20, 21, 22, 23	10/-	15/-	5/-	5/-	3/-	6/-
24 double - -	20/-	30/-	15/-	10/-	5/-	8/-
4 - - -	8/-6	13/-0	4/-6		3/-	6/-
5, 8, 9, 10, 11, 12	6/-6	8/-	4/-6	6/-	5/-	8/-
12A - - -	4/-	6/-			3/-	6/-
26, 28, 29 - -	4/-	6/-			3/-	6/-
27, 30, 31	3/-6	5/-6			3/-	6/-

Glazing in panes, 9d. per pane. Glazing Bars (single) 1/- each.

Saddle Bars (for leaded glazing), Iron 6d. each, Bronze, 1/- each.

Fillets for grooved details, 3d. per lin. foot.

Plain Lead Cills, prepared for fixing under casements, 1/6 per lin. foot.

Ditto, with condensation gutter for fixed glazing (where metal frames are not used), 1/9 per lin. foot.

Coiling Metal Spring Catches, with hook to work by long arm, 2/- each.

Ditto, with pulley to work by cords, 2/6 each.

Special quotation will be given for various forms of gearing, see page 5.

For designs of fittings see pages 37 to 47.

CASEMENT FITTINGS.

These fittings can be made to suit any details for Wood Casements; comparison in design, quality of finish, and price, is invited.

All fittings, of whatever material, are made at my own works, which greatly facilitates the carrying out of special designs (which designs will be reserved when desired).

All parts of our fittings are made to gauge, and are so fitted to our metal casements that broken parts can be replaced without unglazing, and without the assistance of skilled labor.

Our coinage or bronze metal is of a special mixture, and with age takes a beautiful tone, but this can be at once attained by a process, which treatment is permanent and is covered by the prices given for best finished work.

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

Handles and Plates (see opposite page) prepared for Metal Casements; they can be adapted to suit any detail of Wood Casements at prices as below.

No. 1, malleable iron, bronzed or dull blacked, fitted up with coinage metal working parts.

No. 2, hammered iron, finished dull bright.

No. 3, coinage metal, plainly filed.

No. 4, coinage metal, polished and toned, or bronzed.

CASEMENT HANDLES & PLATES.

No.	Malleable Iron, bronzed or painted.	Hammered Iron.	Coinage Metal, plainly filed.	Coinage Metal, polished, toned, or bronzed.
83	2/6	7/6	4/-	5/-
84	1/6	5/-	2/9	3/3
85	2/-	8/6	4/-	5/-
86	2/6	7/6	4/6	5/6
87	2/-	5/6	4/-	5/-
88	1/6	5/6	2/9	3/3
89	1/6	5/-	2/9	3/3

Cheaper Iron Handles than those priced above can be used of ordinary stock patterns, but they are lighter and have all working parts in iron; they are not recommended.

The above fittings can be made in silver, aluminium, brass, &c., &c. In ordering, the "hands" should be stated, and details of the woodwork given full size, both casement and frame.

Nos. 83 and 84 illustrate a right and left hand respectively.

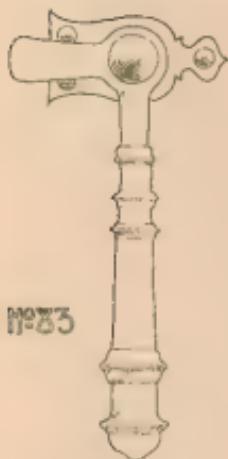
Special designs will be submitted or quoted for, or architects' own designs will be carried out and reserved if desired.

Wardry metal
works Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C

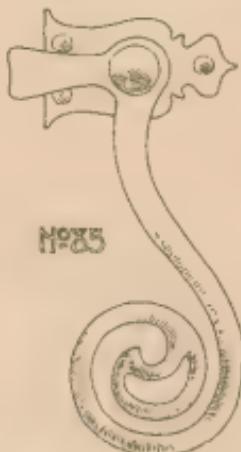
HANDLES FOR
METAL OR WOOD
CASMENTS TO
SUITE ANY DETAILS
THEY CAN BE MADE IN
A VARIETY OF METALS
ABOUT FULL SIZE.



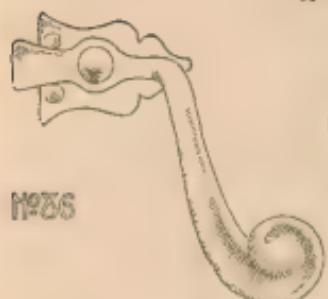
No. 83



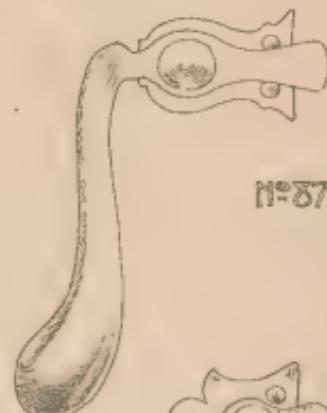
No. 84



No. 85



No. 86



No. 87



No. 88



No. 89

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

Handles and Plates (see opposite page) prepared for either wood or metal casements, at prices as below.

IN HAMMERED IRON ONLY.

No. 75	25/- each	No. 79	9/6 each
" 76	25/- "	" 80	25/- "
" 77	20/- "	" 81	20/- "
" 78	20/- "	" 82	20/- "

NOTE. These handles will be finished with an "old armour" or dull bright surface, or left dull as from the anvil if desired; they can be forged in copper or other metals, for which prices will be given.

In ordering, the "hands" should be stated, and details of the woodwork given full size.

Nos. 75 and 76 illustrate a right and left hand respectively.

Special designs will be submitted or quoted for, or architects' own designs will be carried out and reserved if desired.

Wardry metal
works Salford
Manchester

GEORGE WRAGGE

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London W.C

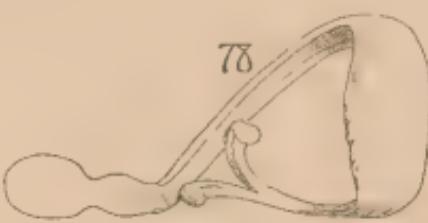
Wrought Metal Handles
for Wood or Iron
Casements

75

76



About Half
full size



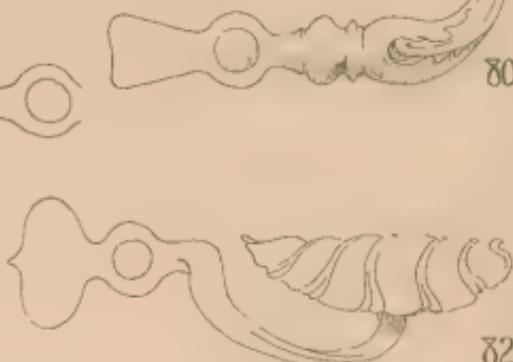
78



80



81



82

PRINT
A. & C.

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

Handles and Plates (see opposite page) prepared for metal or wood casements, at prices as below.

IN HAMMERED IRON ONLY.

No. 65	21/- each	No. 70	8/6 each
" 66	22/- "	" 71	20/- "
" 67	11/- "	" 72	22/- "
" 68	15/- "	" 73	20/- "
" 69	13/- "	" 74	20/- "

NOTE. The examples as illustrated are careful reproductions of old work, and the "feeling" will be thoroughly maintained; they will be finished with an "old armour" or dull bright surface, or left dull as from the anvil if desired; they can be made in hammered copper, bronze, brass, or other metal, and "toned," for which prices will be given. In ordering, the "hands" should be stated, and details of the woodwork given full size.

Nos. 65 and 66 illustrate a right and left hand respectively.

Special designs will be submitted or quoted for, or architects' own designs will be carried out or reserved if desired.

Wardrobe metal
works Salford
Manchester

GEORGE WRAGGE

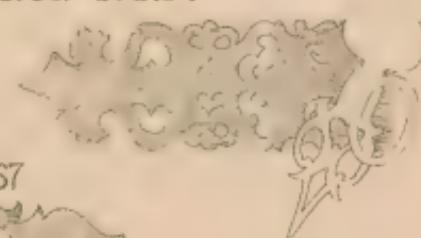
22 Surrey St
Strand
London W.C.

65

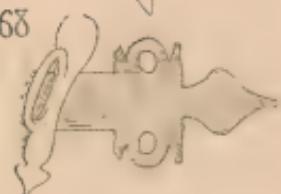


Back Plates for Metal
Casements: Old Samples
in Hammered Iron:

66



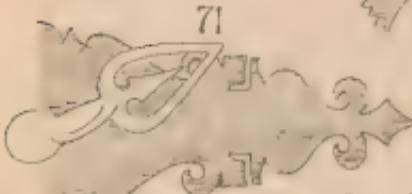
68



half
full size



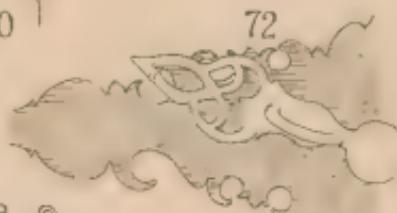
71



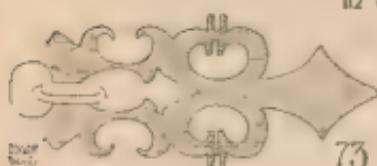
70



72



Can be
reproduced
in any metal



73



74

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

Handle Plates for Metal or Wood Casements (see opposite page.)

These Handle Plates can be fitted to any Casements. They can be made in other metals than those priced below at proportionate rates.

No. 1, malleable iron, bronzed or dull blacked, fitted up with coinage metal working parts.

No. 2, hammered iron, finished dull bright.

No. 3, coinage metal, plainly filed.

No. 4, coinage metal, polished and toned, or bronzed.

HANDLE PLATES.

No.	1	2	3	4
50	1/6	7/6	4/-	4/6
51	1/6	7/-	3/6	4/-
52	1/9	12/6	5/6	6/-
53	1/9	10/6	5/-	5/6
54	1/9	10/6	5/-	5/6
55	1/9	10/6	5/-	5/6
56	2/6	15/-	9/-	10/-

For Saddle Bars see page 34.

Special designs will be submitted or quoted for, or architects' own designs will be carried out or reserved if desired.

Wardry metal
works Salford
Manchester

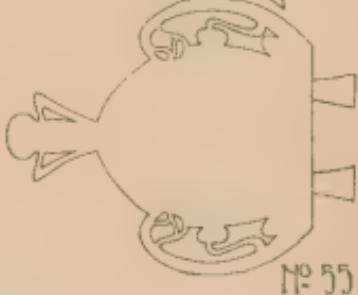
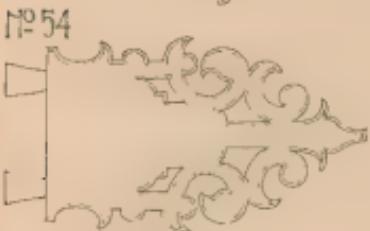
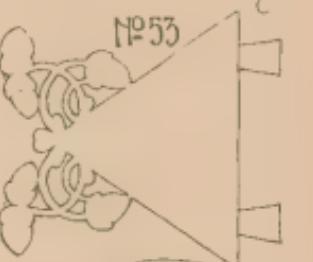
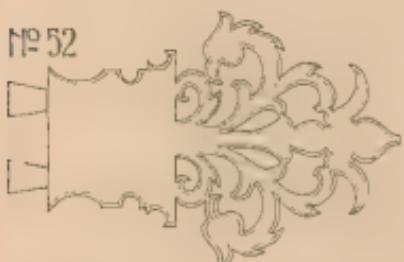
GEORGE WRAGGE

22 Surrey St.
Strand
London W.C.

Made in
any
size
metal

Back Plates
for metal
casements

Half full
size



No. 56

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

Handle Plates for Metal or Wood Casements (see opposite page.)

These Handle Plates can be fitted to any Casements. They can be made in other metals than those priced below at proportionate rates.

No. 1, malleable iron, bronzed or dull blacked, fitted up with coinage metal working parts.

No. 2, hammered iron, finished dull bright.

No. 3, coinage metal, plainly filed.

No. 4, coinage metal, polished and toned, or bronzed.

HANDLE PLATES.				
Nos	1	2	3	4
57	1/9	9/6	4/6	5/-
58	1 6	7/-	3 6	4
59	1/9	10/6	5/-	5/6
60	1/9	10/6	5/-	5/6
61	1 3	9/6	5/-	5 1
62	1/9	9/6	5/-	5/0
63	2/-	11/6	6/-	6/6
64	1/9	9/6	5/6	6/-

For Saddle Bars see page 34.

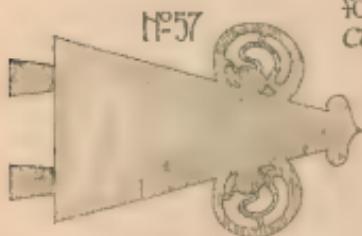
Special designs will be submitted or quoted for, or architects' own designs will be carried out and reserved if desired.

Wardy metal
works Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C

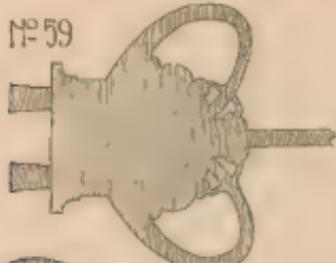
Brass Plates
for metal &
casements



No. 57



No. 58



No. 59



No. 60



No. 61



No. 62

Made in
any &
metal



No. 63

Patent
Wardy



No. 64

GEORGE WRAGGE,

WARDRY METAL WORKS, Salford, MANCHESTER.

STAYS FOR METAL & WOOD CASEMENTS

(see opposite page).

When ordering stays for wood casements it is necessary to give the width of the casement and the full size details of the woodwork, both casement and frame; they can be made in other metals than those priced below at proportionate prices.

No. 1, malleable iron, bronzed or dull blacked, fitted up with coinage metal working parts.

No. 2, hammered iron, finished dull bright.

No. 3, coinage metal, plainly filed.

No. 4, coinage metal, polished and toned, or bronzed.

CASEMENT STAYS.

No.	1				2				3				4			
	1	12	13	14	1	2	14	15	12	1	10	1	12	1	12	1
90					14/0	15/	15/3	16/								
91					12/0	13/	13/3	14/								
92	2/0	2/0	3/3	3/6	3/	3/3	3/0	4/	3/	3/6	4/6	5/6	4/	4/6	5/6	0/0
93	1/0	2/	2/0	3	3/	3/3	3/9	4/	2/6	3/	4	5	3	6/4	5	-6
94	N. 1 m. d. M. c. & r. W. 2 m. l. n.				4	6/5	6/6/8	5/6/6/	-	6/5	6/6/8	5/6/6/	-	6/6/	-	6/6/
95	2/0	2/0	3/3	3/6	3/	3/3	3/0	4	3/0/4/	5/	6/	4/6	5/	6/	0	1

NOTE. Cheaper Iron Stays than those priced above can be used of ordinary stock patterns, but they are lighter and have all working parts in iron, they are not recommended.

Special designs will be submitted or quoted for, or architects own designs will be carried out and reserved if desired.

Wardrobe metal
works Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C



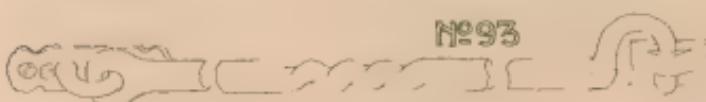
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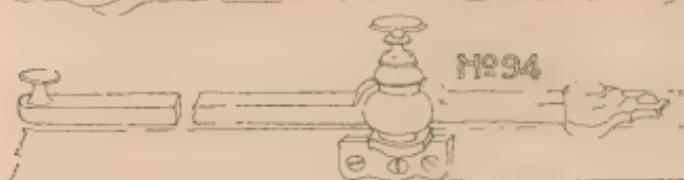
No. 91



No. 92



No. 93



No. 94



No. 95

DETAILS ABOUT
HALF FULL SIZE

CAN BE MADE IN:
VARIOUS METALS

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

The Elevations on opposite page show the various Casements illustrated in the first, and will be in aid of assistance when ordering. Below is given a list of the pages on which each Casement is drawn in section, with details as to rebates, etc., etc.

No. 2 ELEVATION, opening OUTWARDS.....	see pages 9, 11, 21, 23, 31
No. 7 do. do. INWARDS.....	do. 13, 25
No. 5 do. do. OUTWARDS IN PAIRS.....	do. 19
No. 4 do. do. ON CENTRES.....	do. 15, 29
No. 6 do. do. OUTWARDS FROM HEAD.....	do. 9, 11, 21, 23, 31
No. 9 do. do. INWARDS FROM CILL.....	do. 17, 27

Hopper Casements & Sliding ditto for churches, schools, etc., see opposite page, Elevations Nos. 3, 8 & 12. Fitted with pulleys and eyes to work by cords.

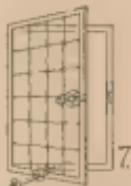
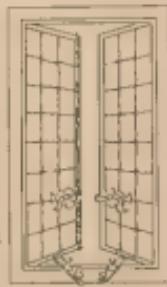
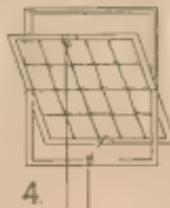
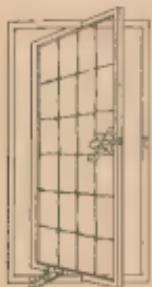
Hopper Casements, either from Nos. 2-18				Sliding Casements, Fitted on No. 12		
Height	Width	No. 12	No. 14	Height	Width	
Under 2ft.	2ft. & under	21/-	18/-	Under 2ft.	2ft. & under	20/-
2ft. & under 2ft. 6	" "	22/-	19/-	2ft. & under 2ft. 6	" "	21/-
2ft. 6 "	3ft.	23/-	20/-	2ft. 6 "	3ft.	22/-
3ft. "	3ft. 6	25/-	22/-	3ft.	3ft. 0	24/-

NOTE. Hopper casements, form No. 3, and sliding casements, elevation No. 12, will be fitted with copper casement (or interior frame) at an extra cost, as follows:—Under 2ft. high, 10/-; 2ft. and under 2ft. 6in., 12/-; 2ft. 6in. and under 3ft. 0in., 14/-; 3ft. 0in. and under 3ft. 6in., 15/-; 3ft. 6in. and under 4ft. 0in., 17/-; 4ft. 0in. and under 4ft. 6in., 19/-; 4ft. 6in. and under 5ft. 0in., 21/-; 5ft. 0in. and under 5ft. 6in., 23/-; 5ft. 6in. and under 6ft. 0in., 25/-; 6ft. 0in. and under 6ft. 6in., 27/-; 6ft. 6in. and under 7ft. 0in., 29/-; 7ft. 0in. and under 7ft. 6in., 31/-; 7ft. 6in. and under 8ft. 0in., 33/-; 8ft. 0in. and under 8ft. 6in., 35/-; 8ft. 6in. and under 9ft. 0in., 37/-; 9ft. 0in. and under 9ft. 6in., 39/-; 9ft. 6in. and under 10ft. 0in., 41/-; 10ft. 0in. and under 10ft. 6in., 43/-; 10ft. 6in. and under 11ft. 0in., 45/-; 11ft. 0in. and under 11ft. 6in., 47/-; 11ft. 6in. and under 12ft. 0in., 49/-; 12ft. 0in. and under 12ft. 6in., 51/-; 12ft. 6in. and under 13ft. 0in., 53/-; 13ft. 0in. and under 13ft. 6in., 55/-; 13ft. 6in. and under 14ft. 0in., 57/-; 14ft. 0in. and under 14ft. 6in., 59/-; 14ft. 6in. and under 15ft. 0in., 61/-; 15ft. 0in. and under 15ft. 6in., 63/-; 15ft. 6in. and under 16ft. 0in., 65/-; 16ft. 0in. and under 16ft. 6in., 67/-; 16ft. 6in. and under 17ft. 0in., 69/-; 17ft. 0in. and under 17ft. 6in., 71/-; 17ft. 6in. and under 18ft. 0in., 73/-; 18ft. 0in. and under 18ft. 6in., 75/-; 18ft. 6in. and under 19ft. 0in., 77/-; 19ft. 0in. and under 19ft. 6in., 79/-; 19ft. 6in. and under 20ft. 0in., 81/-; 20ft. 0in. and under 20ft. 6in., 83/-; 20ft. 6in. and under 21ft. 0in., 85/-; 21ft. 0in. and under 21ft. 6in., 87/-; 21ft. 6in. and under 22ft. 0in., 89/-; 22ft. 0in. and under 22ft. 6in., 91/-; 22ft. 6in. and under 23ft. 0in., 93/-; 23ft. 0in. and under 23ft. 6in., 95/-; 23ft. 6in. and under 24ft. 0in., 97/-; 24ft. 0in. and under 24ft. 6in., 99/-; 24ft. 6in. and under 25ft. 0in., 101/-; 25ft. 0in. and under 25ft. 6in., 103/-; 25ft. 6in. and under 26ft. 0in., 105/-; 26ft. 0in. and under 26ft. 6in., 107/-; 26ft. 6in. and under 27ft. 0in., 109/-; 27ft. 0in. and under 27ft. 6in., 111/-; 27ft. 6in. and under 28ft. 0in., 113/-; 28ft. 0in. and under 28ft. 6in., 115/-; 28ft. 6in. and under 29ft. 0in., 117/-; 29ft. 0in. and under 29ft. 6in., 119/-; 29ft. 6in. and under 30ft. 0in., 121/-; 30ft. 0in. and under 30ft. 6in., 123/-; 30ft. 6in. and under 31ft. 0in., 125/-; 31ft. 0in. and under 31ft. 6in., 127/-; 31ft. 6in. and under 32ft. 0in., 129/-; 32ft. 0in. and under 32ft. 6in., 131/-; 32ft. 6in. and under 33ft. 0in., 133/-; 33ft. 0in. and under 33ft. 6in., 135/-; 33ft. 6in. and under 34ft. 0in., 137/-; 34ft. 0in. and under 34ft. 6in., 139/-; 34ft. 6in. and under 35ft. 0in., 141/-; 35ft. 0in. and under 35ft. 6in., 143/-; 35ft. 6in. and under 36ft. 0in., 145/-; 36ft. 0in. and under 36ft. 6in., 147/-; 36ft. 6in. and under 37ft. 0in., 149/-; 37ft. 0in. and under 37ft. 6in., 151/-; 37ft. 6in. and under 38ft. 0in., 153/-; 38ft. 0in. and under 38ft. 6in., 155/-; 38ft. 6in. and under 39ft. 0in., 157/-; 39ft. 0in. and under 39ft. 6in., 159/-; 39ft. 6in. and under 40ft. 0in., 161/-; 40ft. 0in. and under 40ft. 6in., 163/-; 40ft. 6in. and under 41ft. 0in., 165/-; 41ft. 0in. and under 41ft. 6in., 167/-; 41ft. 6in. and under 42ft. 0in., 169/-; 42ft. 0in. and under 42ft. 6in., 171/-; 42ft. 6in. and under 43ft. 0in., 173/-; 43ft. 0in. and under 43ft. 6in., 175/-; 43ft. 6in. and under 44ft. 0in., 177/-; 44ft. 0in. and under 44ft. 6in., 179/-; 44ft. 6in. and under 45ft. 0in., 181/-; 45ft. 0in. and under 45ft. 6in., 183/-; 45ft. 6in. and under 46ft. 0in., 185/-; 46ft. 0in. and under 46ft. 6in., 187/-; 46ft. 6in. and under 47ft. 0in., 189/-; 47ft. 0in. and under 47ft. 6in., 191/-; 47ft. 6in. and under 48ft. 0in., 193/-; 48ft. 0in. and under 48ft. 6in., 195/-; 48ft. 6in. and under 49ft. 0in., 197/-; 49ft. 0in. and under 49ft. 6in., 199/-; 49ft. 6in. and under 50ft. 0in., 201/-; 50ft. 0in. and under 50ft. 6in., 203/-; 50ft. 6in. and under 51ft. 0in., 205/-; 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113ft. 0in. and under 113ft. 6in., 455/-; 113ft. 6in. and under 114ft. 0in., 457/-; 114ft. 0in. and under 114ft. 6in., 459/-; 114ft. 6in. and under 115ft. 0in., 461/-; 115ft. 0in. and under 115ft. 6in., 463/-; 115ft. 6in. and under 116ft. 0in., 465/-; 116ft. 0in. and under 116ft. 6in., 467/-; 116ft. 6in. and under 117ft. 0in., 469/-; 117ft. 0in. and under 117ft. 6in., 471/-; 117ft. 6in. and under 118ft. 0in., 473/-; 118ft. 0in. and under 118ft. 6in., 475/-; 118ft. 6in. and under 119ft. 0in., 477/-; 119ft. 0in. and under 119ft. 6in., 479/-; 119ft. 6in. and under 120ft. 0in., 481/-; 120ft. 0in. and under 120ft. 6in., 483/-; 120ft. 6in. and under 121ft. 0in., 485/-; 121ft. 0in. and under 121ft. 6in., 487/-; 121ft. 6in. and under 122ft. 0in., 489/-; 122ft. 0in. and under 122ft. 6in., 491/-; 122ft. 6in. and under 123ft. 0in., 493/-; 123ft. 0in. and under 123ft. 6in., 495/-; 123ft. 6in. and under 124ft. 0in., 497/-; 124ft. 0in. and under 124ft. 6in., 499/-; 124ft. 6in. and under 125ft. 0in., 501/-; 125ft. 0in. and under 125ft. 6in., 503/-; 125ft. 6in. and under 126ft. 0in., 505/-; 126ft. 0in. and under 126ft. 6in., 507/-; 126ft. 6in. and under 127ft. 0in., 509/-; 127ft. 0in. and under 127ft. 6in., 511/-; 127ft. 6in. and under 128ft. 0in., 513/-; 128ft. 0in. and under 128ft. 6in., 515/-; 128ft. 6in. and under 129ft. 0in., 517/-; 129ft. 0in. and under 129ft. 6in., 519/-; 129ft. 6in. and under 130ft. 0in., 521/-; 130ft. 0in. and under 130ft. 6in., 523/-; 130ft. 6in. and under 131ft. 0in., 525/-; 131ft. 0in. and under 131ft. 6in., 527/-; 131ft. 6in. and under 132ft. 0in., 529/-; 132ft. 0in. and under 132ft. 6in., 531/-; 132ft. 6in. and under 133ft. 0in., 533/-; 133ft. 0in. and under 133ft. 6in., 535/-; 133ft. 6in. and under 134ft. 0in., 537/-; 134ft. 0in. and under 134ft. 6in., 539/-; 134ft. 6in. and under 135ft. 0in., 541/-; 135ft. 0in. and under 135ft. 6in., 543/-; 135ft. 6in. and under 136ft. 0in., 545/-; 136ft. 0in. and under 136ft. 6in., 547/-; 136ft. 6in. and under 137ft. 0in., 549/-; 137ft. 0in. and under 137ft. 6in., 551/-; 137ft. 6in. and under 138ft. 0in., 553/-; 138ft. 0in. and under 138ft. 6in., 555/-; 138ft. 6in. and under 139ft. 0in., 557/-; 139ft. 0in. and under 139ft. 6in., 559/-; 139ft. 6in. and under 140ft. 0in., 561/-; 140ft. 0in. and under 140ft. 6in., 563/-; 140ft. 6in. and under 141ft. 0in., 565/-; 141ft. 0in. and under 141ft. 6in., 567/-; 141ft. 6in. and under 142ft. 0in., 569/-; 142ft. 0in. and under 142ft. 6in., 571/-; 142ft. 6in. and under 143ft. 0in., 573/-; 143ft. 0in. and under 143ft. 6in., 575/-; 143ft. 6in. and under 144ft. 0in., 577/-; 144ft. 0in. and under 144ft. 6in., 579/-; 144ft. 6in. and under 145ft. 0in., 581/-; 145ft. 0in. and under 145ft. 6in., 583/-; 145ft. 6in. and under 146ft. 0in., 585/-; 146ft. 0in. and under 146ft. 6in., 587/-; 146ft. 6in. and under 147ft. 0in., 589/-; 147ft. 0in. and under 147ft. 6in., 591/-; 147ft. 6in. and under 148ft. 0in., 593/-; 148ft. 0in. and under 148ft. 6in., 595/-; 148ft. 6in. and under 149ft. 0in., 597/-; 149ft. 0in. and under 149ft. 6in., 599/-; 149ft. 6in. and under 150ft. 0in., 601/-; 150ft. 0in. and under 150ft. 6in., 603/-; 150ft. 6in. and under 151ft. 0in., 605/-; 151ft. 0in. and under 151ft. 6in., 607/-; 151ft. 6in. and under 152ft. 0in., 609/-; 152ft. 0in. and under 152ft. 6in., 611/-; 152ft. 6in. and under 153ft. 0in., 613/-; 153ft. 0in. and under 153ft. 6in., 615/-; 153ft. 6in. and under 154ft. 0in., 617/-; 154ft. 0in. and under 154ft. 6in., 619/-; 154ft. 6in. and under 155ft. 0in., 621/-; 155ft. 0in. and under 155ft. 6in., 623/-; 155ft. 6in. and under 156ft. 0in., 625/-; 156ft. 0in. and under 156ft. 6in., 627/-; 156ft. 6in. and under 157ft. 0in., 629/-; 157ft. 0in. and under 157ft. 6in., 631/-; 157ft. 6in. and under 158ft. 0in., 633/-; 158ft. 0in. and under 158ft. 6in., 635/-; 158ft. 6in. and under 159ft. 0in., 637/-; 159ft. 0in. and under 159ft. 6in., 639/-; 159ft. 6in. and under 160ft. 0in., 641/-; 160ft. 0in. and under 160ft. 6in., 643/-; 160ft. 6in. and under 161ft. 0in., 645/-; 161ft. 0in. and under 161ft. 6in., 647/-; 161ft. 6in. and under 162ft. 0in., 649/-; 162ft. 0in. and under 162ft. 6in., 651/-; 162ft. 6in. and under 163ft. 0in., 653/-; 163ft. 0in. and under 163ft. 6in., 655/-; 163ft. 6in. and under 164ft. 0in., 657/-; 164ft. 0in. and under 164ft. 6in., 659/-; 164ft. 6in. and under 165ft. 0in., 661/-; 165ft. 0in. and under 165ft. 6in., 663/-; 165ft. 6in. and under 166ft. 0in., 665/-; 166ft. 0in. and under 166ft. 6in., 667/-; 166ft. 6in. and under 167ft. 0in., 669/-; 167ft. 0in. and under 167ft. 6in., 671/-; 167ft. 6in. and under 168ft. 0in., 673/-; 168ft. 0in. and under 168ft. 6in., 675/-; 168ft. 6in. and under 169ft. 0in., 677/-; 169ft. 0in. and under 169ft. 6in., 679/-; 169ft. 6in. and under 170ft. 0in., 681/-; 170ft. 0in. and under 170ft. 6in., 683/-; 170ft. 6in. and under 171ft. 0in., 685/-; 171ft. 0in. and under 171ft. 6in., 687/-; 171ft. 6in. and under 172ft. 0in., 689/-; 172ft. 0in. and under 172ft. 6in., 691/-; 172ft. 6in. and under 173ft. 0in., 693/-; 173ft. 0in. and under 173ft. 6in., 695/-; 173ft. 6in. and under 174ft. 0in., 697/-; 174ft. 0in. and under 174ft. 6in., 699/-; 174ft. 6in. and under 175ft. 0in., 701/-; 175ft. 0in. and under 175ft. 6in., 703/-; 175ft. 6in. and under 176ft. 0in., 705/-; 176ft. 0in. and under 176ft. 6in., 707/-; 176ft. 6in. and under 177ft. 0in., 709/-; 177ft. 0in. and under 177ft. 6in., 711/-; 177ft. 6in. and under 178ft. 0in., 713/-; 178ft. 0in. and under 178ft. 6in., 715/-; 178ft. 6in. and under 179ft. 0in., 717/-; 179ft. 0in. and under 179ft. 6in., 719/-; 179ft. 6in. and under 180ft. 0in., 721/-; 180ft. 0in. and under 180ft. 6in., 723/-; 180ft. 6in. and under 181ft. 0in., 725/-; 181ft. 0in. and under 181ft. 6in., 727/-; 181ft. 6in. and under 182ft. 0in., 729/-; 182ft. 0in. and under 182ft. 6in., 731/-; 182ft. 6in. and under 183ft. 0in., 733/-; 183ft. 0in. and under 183ft. 6in., 735/-; 183ft. 6in. and under 184ft. 0in., 737/-; 184ft. 0in. and under 184ft. 6in., 739/-; 184ft. 6in. and under 185ft. 0in., 741/-; 185ft. 0in. and under 185ft. 6in., 743/-; 185ft. 6in. and under 186ft. 0in., 745/-; 186ft. 0in. and under 186ft. 6in., 747/-; 186ft. 6in. and under 187ft. 0in., 749/-; 187ft. 0in. and under 187ft. 6in., 751/-; 187ft. 6in. and under 188ft. 0in., 753/-; 188ft. 0in. and under 188ft. 6in., 755/-; 188ft. 6in. and under 189ft. 0in., 757/-; 189ft. 0in. and under 189ft. 6in., 759/-; 189ft. 6in. and under 190ft. 0in., 761/-; 190ft. 0in. and under 190ft. 6in., 763/-; 190ft. 6in. and under 191ft. 0in., 765/-; 191ft. 0in. and under 191ft. 6in., 767/-; 191ft. 6in. and under 192ft. 0in., 769/-; 192ft. 0in. and under 192ft. 6in., 771/-; 192ft. 6in. and under 193ft. 0in., 773/-; 193ft. 0in. and under 193ft. 6in., 775/-; 193ft. 6in. and under 194ft. 0in., 777/-; 194ft. 0in. and under 194ft. 6in., 779/-; 194ft. 6in. and under 195ft. 0in., 781/-; 195ft. 0in. and under 195ft. 6in., 783/-; 195ft. 6in. and under 196ft. 0in., 785/-; 196ft. 0in. and under 196ft. 6in., 787/-; 196ft. 6in. and under 197ft. 0in., 789/-; 197ft. 0in. and under 197ft. 6in., 791/-; 197ft. 6in. and under 198ft. 0in., 793/-; 198ft. 0in. and under 198ft. 6in., 795/-; 198ft. 6in. and under 199ft. 0in., 797/-; 199ft. 0in. and under 199ft. 6in., 799/-; 199ft. 6in. and under 200ft. 0in., 801/-; 200ft. 0in. and under 200ft. 6in., 803/-; 200ft. 6in. and under 201ft. 0in., 805/-; 201ft. 0in. and under 201ft. 6in., 807/-; 201ft. 6in. and under 202ft. 0in., 809/-; 202ft. 0in. and under 202ft. 6in., 811/-; 202ft. 6in. and under 203ft. 0in., 813/-; 203ft. 0in. and under 203ft. 6in., 815/-; 203ft. 6in. and under 20

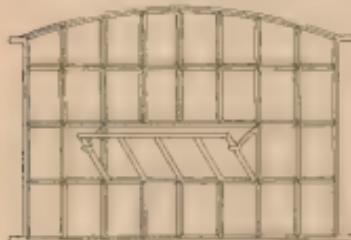
Wardy metal
works Salford
Manchester

GEORGE WRAGGE

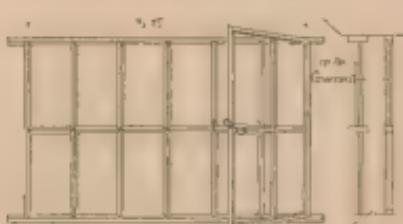
22 Surrey St.
Strand
London W.C.



Elevations
of
Casements
Shewing
method of
opening



10. Police Cell Windows
so made for various
County Councils



11. Police Cell Windows as
adopted by many
County Councils

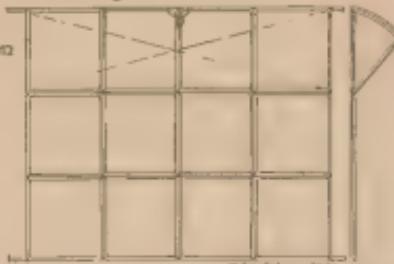


Sliding Sash



13. Fever Hospital window
with secret @ @
opening gearing

inch scale



inch scale

14. Stable Windows
with Hopper vent
galvanized

GEORGE WRAGGE,
WARDRY METAL WORKS, SALFORD,
MANCHESTER.

GEARING.

This is a special and big department at my works. Many of the large modern public buildings are fitted up with my gearing.

GEARING for ranges of Lantern and other Lights opening in every form,

GEARING for Fanlights,
and suitable for Metal or Wood Casements.

All vertical and horizontal rods are of PLANISHED STEEL, while the arms, brackets, guides, &c., &c., are of malleable iron, carefully machined and fitted, all joints being riveted with BRONZE pins.

The regulators are of coinage metal, with specially hard metal cogs and working parts, while the ends of vertical rods are lathe-cut, square-threaded, of quick pitch.

Drawings and estimates submitted on receipt of specification and quantities.

NOTE. The patent gearing of other makers will be fitted to our metal casements if desired.

SASHES.

IN WROUGHT STEEL, IRON,
& GUN METAL.

See other side for full description.

GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

SECTIONS OF WROUGHT STEEL & IRON SASHES.

WROUGHT SASHES are now used almost exclusively in place of Cast.

They are invariably cheaper.

They take up less daylight.

They can be better adapted to varying sizes and shapes.

They do not break through settlement of building.

The opening lights can be better fitted.

All joints are mitred by machinery (see page 55), and are interlocked.
Any form of Casement shewn in this Catalogue can be fitted to these Sashes.

Any shape of window can be made (see page 55).

Quick delivery can be given (from 5,000 to 10,000 superficial feet of these Sashes are sent out WEEKLY).

The bulk of the sections illustrated on opposite page are kept in stock, in many cases the rolls are my own property (thereby ensuring well-rolled material), and some of the sections are registered.

Rolls will be turned for special sections.

All material for these Sashes and Casements is English rolled.

For prices see page 54.

Wardy metal
works Salford
Manchester

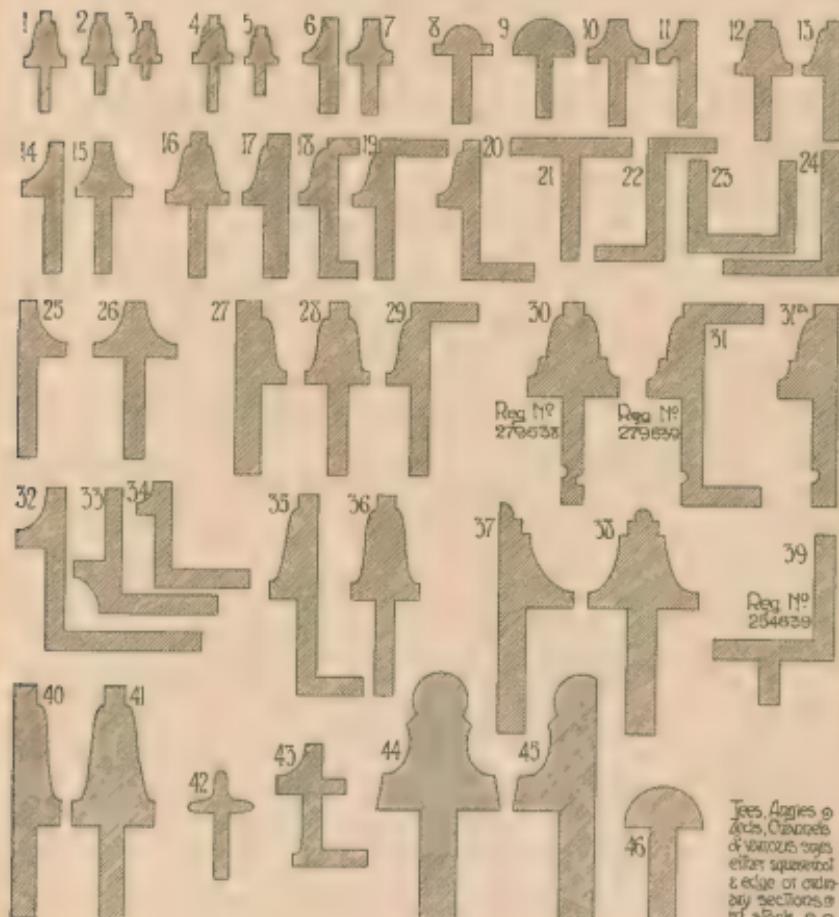
GEORGE WRAGGE

22 Surrey St
Strand
London W.C

Rolls Turned
for special
sections:

Hot Steel
and iron
sections
for window
frames.

Full size @
@ details



GEORGE WRAGGE, WARDRY METAL WORKS, SALFORD, MANCHESTER.

It is desired that a specification and set of quantities be sent for special quotation. Owing to the varying sizes, sections, forms of casements, and area of the panes, it is impossible to give a complete price list. The prices given below will however be a guide.

The larger the area of sash and the fewer the panes, the lower the price; they have been made frequently as low as 5d. per sup. foot (see below) 10ft. x 8ft., in 16 squares.

Sashes similar to elevation No. 15 (opposite page) but with square head and without casement	Sections Nos. 10 & 11. 1/2in.	Sections Nos. 16 & 17. 1/2in.	Sections Nos. 10 & 31a. 2in.
4ft. high x 2ft. 6in. wide in 4 sqrs.	1 1/2d	1d	
4ft. high x 2ft. 6in. wide in 6 sqrs.	1 1/2d	1 1/2d	
6ft. high x 4ft. wide in 12 squares	8d	9 1/2d	1 1/2d
6ft. high x 4ft. wide in 16 squares	10d	1 1/2d	1 1/2d
8ft. high x 5ft. wide in 12 squares		6 1/2d	9d
8ft. high x 5ft. wide in 20 squares		8 1/2d	1 1/2d
10ft. high x 8ft. wide in 16 squares		5d	7d
10ft. high x 8ft. wide in 30 squares		6 1/2d	8 1/2d

NOTE. The superficial area is calculated by measuring the extreme height by the width (exclusive of lugs).

In ordering it is necessary to state whether to glaze from outside or inside; if the latter method is adopted re-glazing can be inexpensively done. In all cases the sashes are drilled for pegs to hold glass in position until the mastic sets (whether glazing inside or out).

EXTRAS.

Casements to swing on centres, say 2ft. square, fitted with pulleys and eyes for cords, from 12/6, each according to section of bar. Casements to fall back from sill, from 15/6 each. Casements can be made to take out for cleaning purposes. Special quotation will be given on receipt of specification and quantities.

NOTE. Rod or other gearing can be fitted to these casements (see page 50).

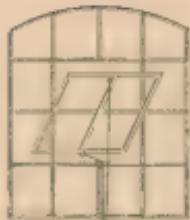
Segmental or semi-circular heads to sashes of sections up to and including 1/2in. and up to 4ft. 6in. wide, 2/6 each; if of 2in. section, 3/-; if over 4ft. 6in. wide, up to say 8ft., 3/6 and 4/6 respectively.

Wardrobe metal
works Salford
Manchester

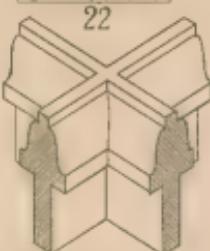
GEORGE WRAGGE

22 Surrey St
Strand
London W.C

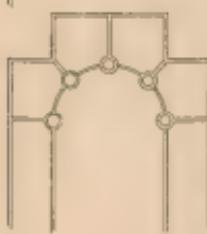
Some forms of
windows in wrought
steel with mitred joints
and in cast iron



Section
full size



Showing
how a
joint
is formed



Special Quotations
on receipt of
specifications
and quantities

32



Any form of
opening
can be filled to
these frames



METAL WORK.

In iron, copper, brass, bronze, aluminium, &c., &c.,
Hammered or Cast.

Designs & prices will be posted on application.

Gates & Grylles.

Vanes & Terminals.

Balustrades & Newels.

Hinges & Door Furniture.

Hanging Signs & Boards.

Dog Grates.

Fenders & Irons.

&c., &c.

Chancel Screens.

Altar Rails & Standards.

Lecterns, Reading Desks.

Font Covers.

Communion Plate.

Lamps & Candlesticks.

Ecclesiastical Door Fittings.

&c., &c.

Repoussé Work in pewter, lead, copper, &c.
Memorial Tablets & Engraved Plates.

Gas & Electric Light Fittings,
In brass, copper, aluminium, iron, &c.

LEADED LIGHTS.

Specimens, designs & prices on application.



GEORGE WRAGGE

Wardley metal
works Salford
Manchester

22 Sunney St
Strand
London W.C.

PARK AND ENTRANCE GATES

N^o 500







GEORGE WRAGGE

Wrought metal
works Salford
Manchester
22 Surrey
Strand
London W.C.

No 114

GATES & GRILLES
CHANCEL SCREENS

ALTAR RAILS &
STANDARDS

DOG GRATES
PONDERS & IRONS

RAILINGS AND
BALUSTRADES

GAS & ELECTRIC
LIGHT FITTINGS

VANES
TERMINALS



From the collections of Sydney Living Museums / Historic Houses Trust of NSW

GEORGE WRAGGE

Ward's metal
works Salford
Manchester

22 Surrey St
Strand
London W.C.

STAIR
BALUSTERS
NEWELS &
HANDRAILS.
STAIR RAILING

Nº 800



& PANELLING
IN HAMMERED
IRON, BRONZE
COPPER, &
ALUMINIUM &c

Nº 801



Nº 802



Nº 803



Nº 804





From the collections of Sydney Living Museums / Historic Houses Trust of NSW



No. 700



No. 701



No. 702

GEORGE WRAGGE

Wardley metal
works Salford
Manchester

22 Surrey St
Strand
London W.C.

VALVES & TERMINALS
IN HAMMERED IRON
BRONZE OR OTHER
NONCORROSIVE METAL



No. 703



No. 704



No. 705



No. 706



No. 707



GEORGE WRAGGE

Wardley metal
works Salford
Manchester
22 Surrey St
Strand
London W.C.

DOG GRATES AND OTHER
FORMS IN HAMMERED IRON,
STEEL, BRONZE, COPPER, :
KROMAHND ETC. 

IRONS, BRASSES, AND DOGS
FENDERS AND KERBS, :
HOODS IN VARIOUS METALS

No 400

Wardry metal
works Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C



No. 300



No. 301



No. 302



480V-HALF
FULL-SIZE

No. 303



No. 304



No. 305



No. 306



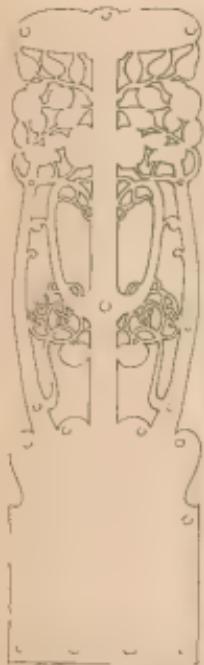
EDGAR
WOOD

No. 307

Wardry metal
works Salford
Manchester

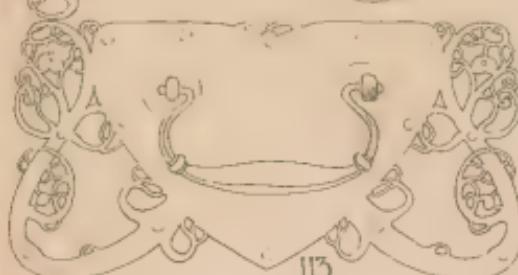
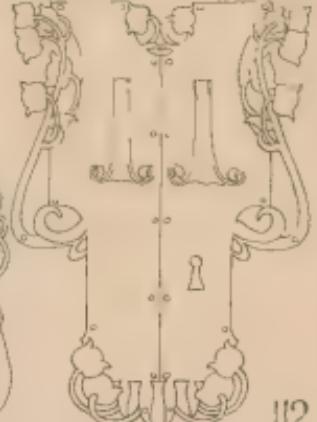
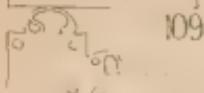
GEORGE WRAGGE

22 Surrey St
Strand
London W.C



CABINET
METAL WORK
IN COPPER
BRASS IRON
ALUMINUM ETC

HALF
FULL
SIZE

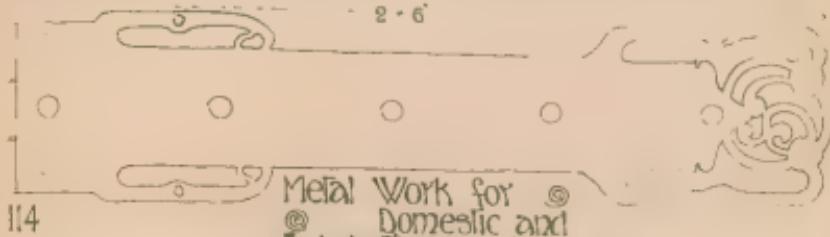


Wardrobe metal
works Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C

2-6



Metal Work for
Domestic and
Ecclesiastical purposes



115

116

117

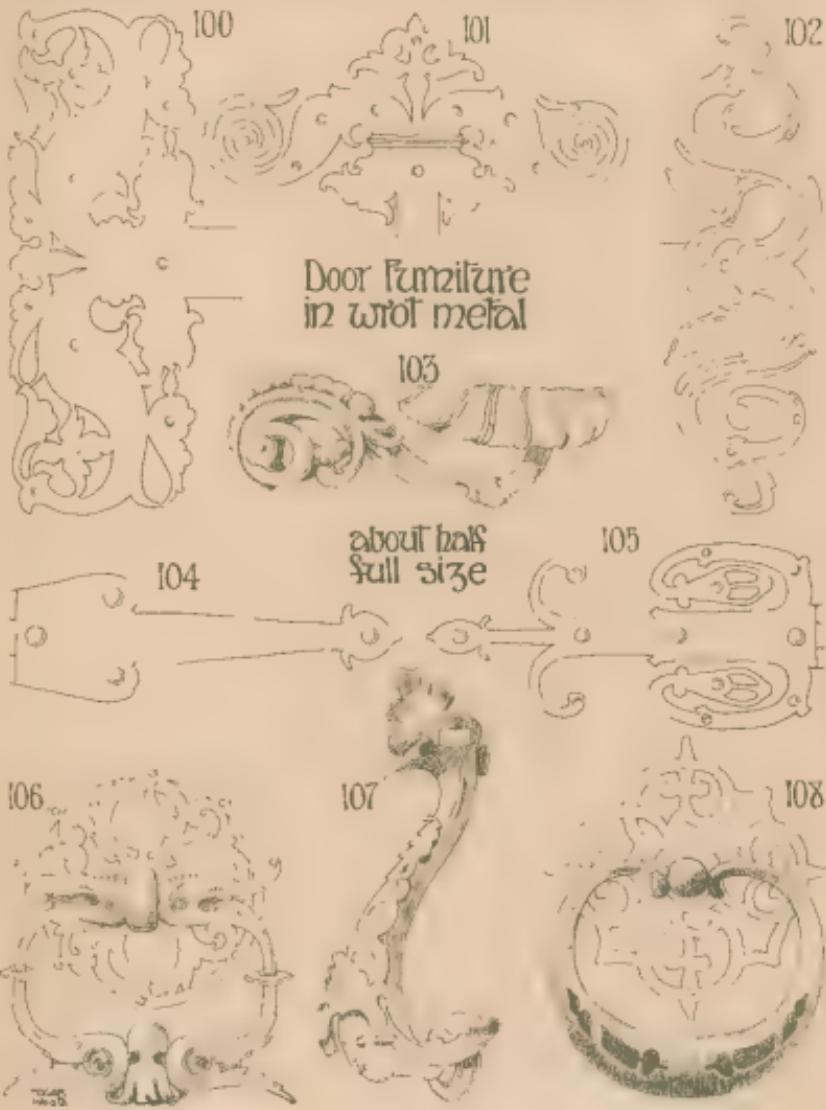
2-6



Wardry metal
works, Salford
Manchester

GEORGE WRAGGE

22 Surrey St
Strand
London W.C



GEORGE



Wardly metal
works Salford
Manchester

WRAGGE

22 Surrey St
Strand
London W.C.



Pillar, Hanging Signs
and other varieties
in wood or metal. @
Name Plates @
Billboard Signs etc.



In Bronze \odot \odot \odot
Aluminizum etc
bott cast. wrought
engraved or \odot
 \odot reboussé



GEORGE WRAGGE

Worthy metal
works Salford
Manchester
22 Surrey St
Strand
London W.C.

№ 600

CHANCEL SCREENS
AND GATES
COMMUNION RAILS
AND LECTERNS
READING DESKS
& FONT COVERS
COMMUNION PLATE ETC

GEORGE WRAGGE

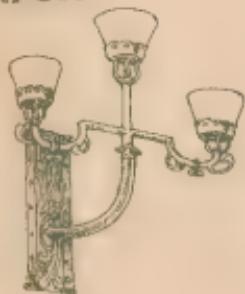
Wardrobe
works Salford
Manchester

22 Surrey St
Strand
London W.C.

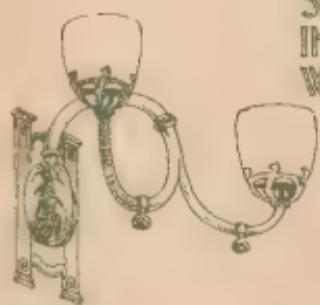
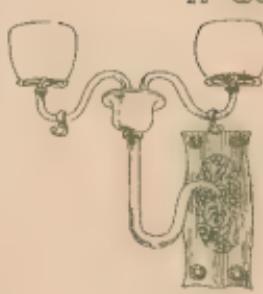
REPOUSSÉ AND BEATEN WORK IN
PEWTER, LEAD, BRASS, COPPER, & OTHER
METALS FOR VARIOUS PURPOSES



N^o 300



N^o 301

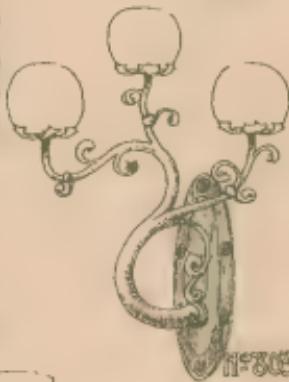


N^o 302

GEORGE WRAGGE

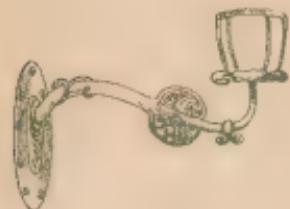
Wardy Metal
works Salford
Manchester
22 Surrey Street
Strand
London W.C.

GAS FITTINGS TO
SPECIAL DESIGNS
IN ANY METAL:
WROUGHT or CAST



N^o 303

N^o 304



N^o 305



N^o 306

No 700



700



No 702



No 701



No 703

22 Surrey St

Strand

London W.C

Wardle metal
works Salford
Manchester

ELECTRIC LIGHT FITTINGS IN A
VARIETY OF METALS EITHER
HAMMERED OR CAST

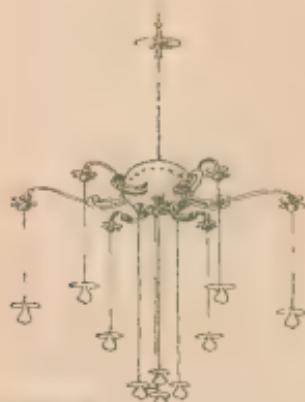
22 Surrey St

Strand

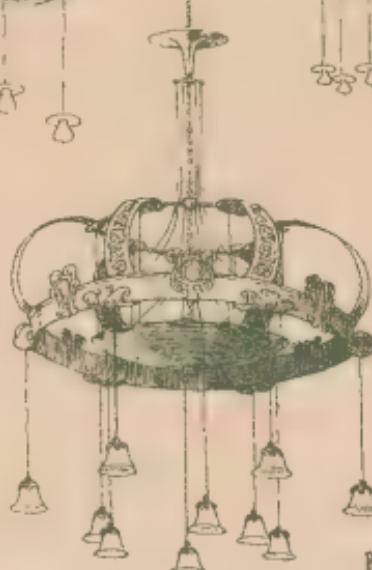
London W.C



No 704



No 705



No 706

GEORGE WRAGGE

Wardley metal
works Salford
Manchester
22 Sunney St
Strand
London W.C.

HANGING-LAMPS
TABLE-LAMPS
BRACKET-LAMPS
& OTHER SPECIAL
FORMS IN BRONZE
BRASS HAMMERED
IRON & VARIOUS
MATERIALS IN
GLASS & SHADES
IN A VARIETY OF SPECIAL
DESIGN & COLOUR

CANDLESTICKS
CANDELABRA
CANDLE RISERS
SCONCES AND
OTHER FORMS
IN BRONZE, BRASS
HAMMERED IRON
& ETC. ETC.
SHADES & SPECIAL
DESIGN & COLOUR



GEORGE WRAGGE

Wardy metal
works Delford
Manchester
22 Surrey St
Strand
London W.C.

MEMORIALS
TABLETS IN
VARIOUS
FORMS IN
BRASS
BROMZEE
ALUMINIUM
COPPER SILVER
ETC & WITH
ENAMELS

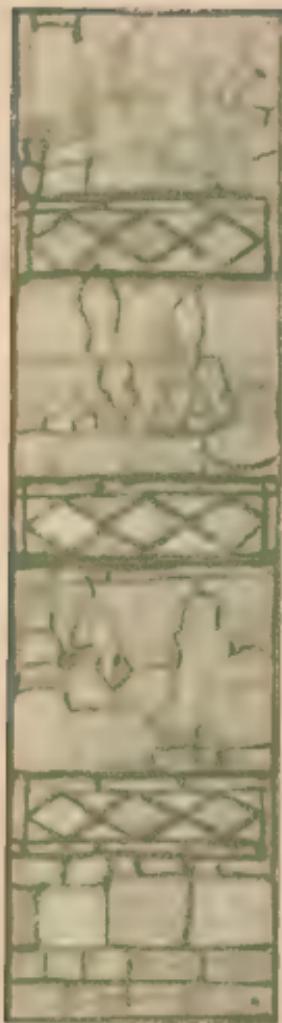
NAME PLATES
ENGRAVED:
CAST OR
REPOUSSE
IN ANY METAL
DESIGNS
SUBMITTED
FOR APPROVAL



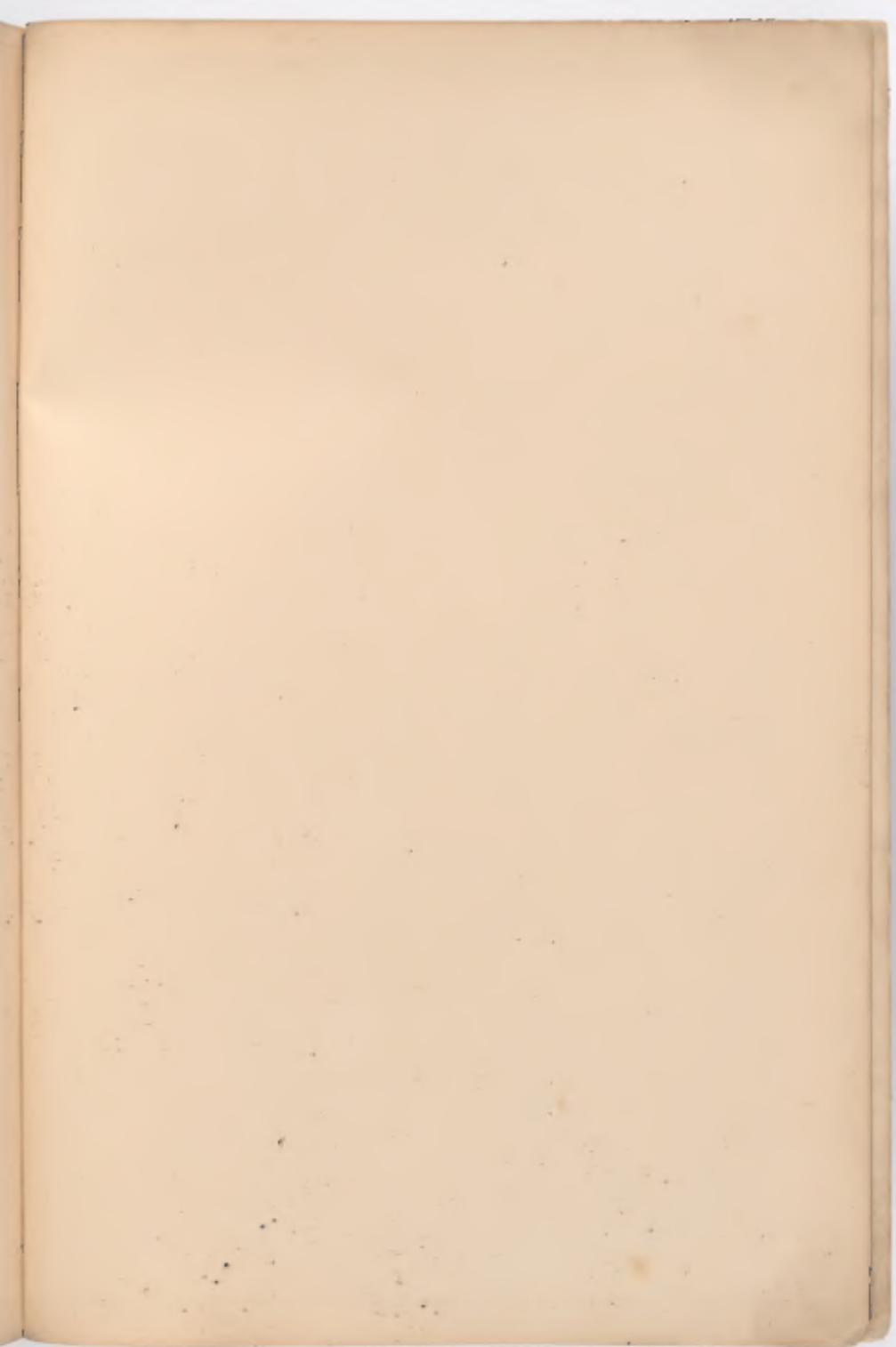
LEADED LIGHTS & STAINED GLASS.

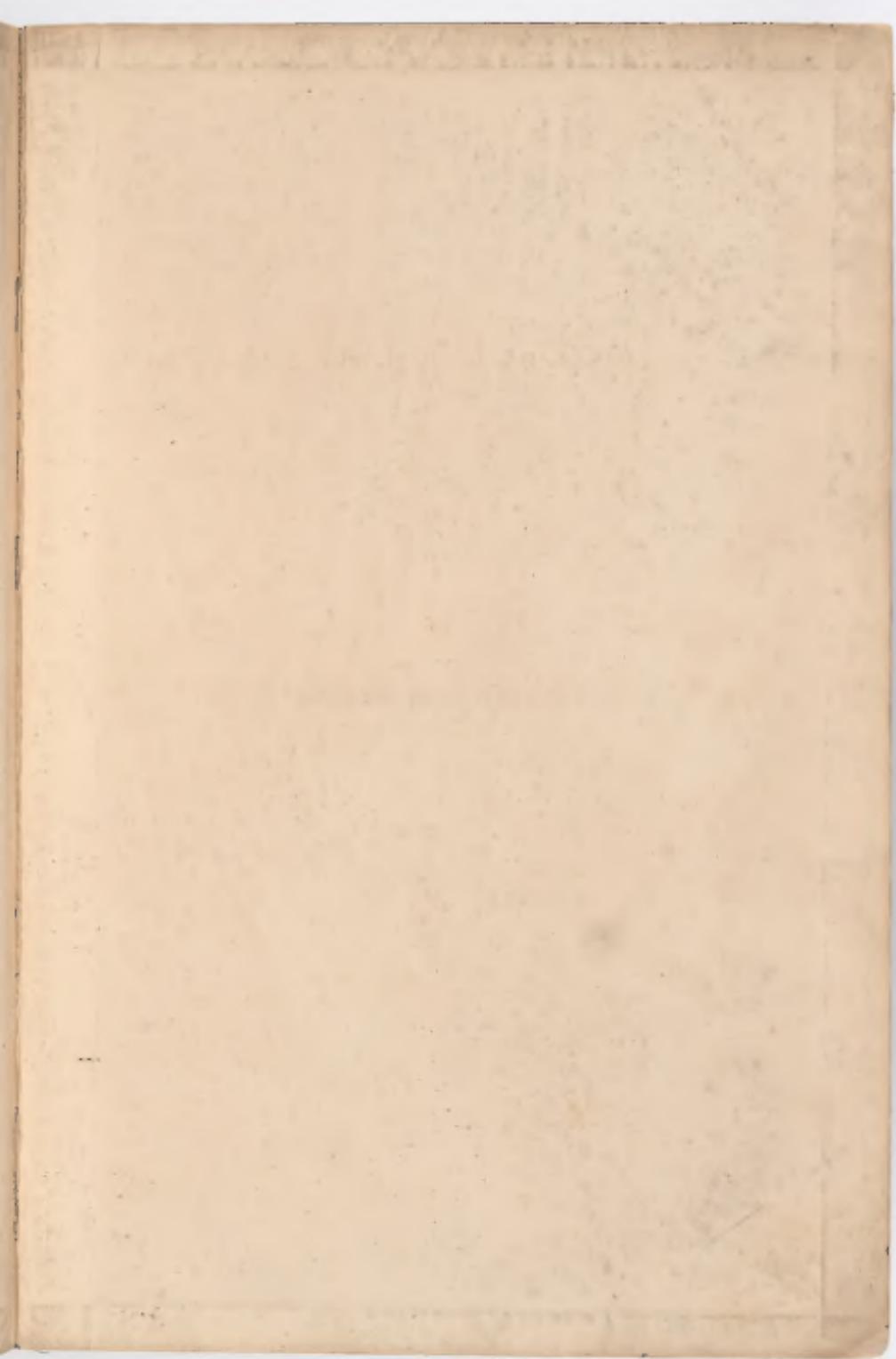
When Casements are being used and leaded work is required, it is advisable that the Maker of the former should provide the latter (if his design and craftsmanship be satisfactory), and also do the glazing; delays, wrong sizes, &c., &c., would thereby to a great extent be avoided.

I have a capable staff of Fixers & Glaziers and shall be pleased to give estimates for this portion of the work, as also to submit designs and examples free of charge.



STAINED:GLASS
& LEADED:LIGHTS
DESIGNS:ON:&
APPLICATION:





GEORGE WRAGGE

WARDRY: METAL WORKS
SALFORD
MANCHESTER:
22 SURREY STREET: STRAND
LONDON: W.C.



METAL: CASEMENTS
AND FRAMES WROUGHT: IRON

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